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ABSTRACT

Texts from videotaped presentations which were part of the project "Interactive Television Colloquium Series on Career Education for Handicapped Adolescents" are presented in this document. (The project focused on responding to the need for preservice and inservice training for those individuals who are responsible for preparing handicapped students--particularly mentally handicapped--for meaningful employment.) The first two presentations, titled "Career Education: Where We Came From, Where We Are, and Where We Should Be Going" and "Developing Career Awareness: The Foundation of a Career Education Program," are by Oliver P. Kolstoe. The first presentation discusses the development of career education for the handicapped from a historical perspective. The future of secondary programs for the mentally retarded is also covered. The second presentation serves to provide the special education teacher with ideas about programs and curricular materials to enhance career awareness. A number of commercial materials are described in detail. The third presentation, "Career Exploration: An Integral Part of the Career Education Program" by Gary M. Clark, discusses various aspects of career exploration for the handicapped adolescent. The final presentation, "Preparing the Handicapped for Gainful Employment" by Fount G. Warren, focuses on the shortcomings of typical secondary school programs for the mentally retarded. (SH)

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on
CAREER EDUCATION FOR HANDICAPPED ADOLESCENTS
1976

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INTRODUCTION

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CAREER EDUCATION:
Where We Came From, Where We Are, And Where We Should Be Going

OLIVER P. KOLSTOE
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DEVELOPING CAREER AWARENESS:
The Foundation Of A Career Education Program

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CAREER EXPLORATION:
An Integral Part Of The Career Education Program

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PREPARING THE HANDICAPPED FOR GAINFUL EMPLOYMENT

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INTRODUCTION

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The "Interactive Television Colloquium Series on Career Education for Handicapped Adolescents" was conceived in response to the need for preservice and inservice training for those individuals who are responsible for preparing handicapped students for meaningful employment. In conjunction with the first dimension of this project, recognized experts and practitioners were invited to participate in a series of televised programs on the fundamental aspects of career education for handicapped adolescents. More than 400 participants viewed the four programs which were televised on the Indiana Higher Education Telecommunication System (IHETS). This monograph is presented as an endeavor to reach a larger portion of the target population, teachers and counselors who are charged with the responsibility of meeting the career needs of handicapped adolescents.

The selections which follow represent the scripts used for the televised programs. During the period of the project, color videotapes of the programs will be available for free loan to universities and public and private school programs. The last page of this monograph provides information about requesting loan copies

of the programs.

In the first section of the monograph Oliver P. Kolstoe, Chairman of the Department of Mental Retardation at the University of Northern Colorado, provides an overview of career education as it relates to handicapped students. Kolstoe discusses the development of career education for the handicapped from an historical perspective as well as discussing the future of secondary programs for the mentally retarded.

Kolstoe, in the second section of the monograph, discusses the objectives of career awareness programs. This section should serve to provide the special education teacher with ideas about programs and curricular materials to enhance career awareness. Kolstoe describes in detail a number of commercial materials designed to facilitate the development of career awareness.

Gary M. Clark, Professor of Special Education at the University of Kansas, served as the speaker for the program on career exploration. Clark provides answers to the following questions about career exploration for the handicapped adolescent: What is it? How does it occur? When and where does it occur? How can it be provided? Clark concludes with a timely discussion of the teacher's and/or counselor's responsibilities in providing a career exploration program.

The final section of the monograph was provided by Fount G. Warren, Director of the Kent Occupational High School in Grand Rapids, Michigan. Warren's provocative paper focuses on the shortcomings of typical secondary school programs for the mentally

retarded. Warren contrasts typical secondary programs with the atypical program at Kent Occupational High School. Warrer's paper should cause special education teachers and administrators to question typical practices and current trends in secondary school programs for the mentally retarded.

In conclusion I would like to recognize a few of the many individuals who made this project possible. Special thanks are due to the featured speakers who developed the scripts for the television programs and this monograph. It is refreshing to work with professionals such as Dr. Kolstoe, Dr. Clark, and Mr. Warren. John Strathman, the Producer/Director for the television series, must be recognized for the countless hours that he devoted to the production of the television programs. My sincere appreciation must also be expressed to Margaret Carroll for the typing of this monograph. The project was made possible by a grant from the U. S. Office of Education, Bureau of Education for the Handicapped, and Purdue University for allowing me the time to participate in the project.

GMB
August, 1976

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CAREER EDUCATION FOR THE HANDICAPPED: WHERE WE CAME FROM, WHERE WE ARE NOW, AND WHERE WE ARE GOING

Oliver P. Kolstoe
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In the middle of the 1960's as the emphasis on national goals shifted from materialism toward humanism, programs for the retarded, whether they were in institutions or special classes in public schools, became the focus of considerable discontent. First of all, follow-up studies reported that youngsters in the special classes did not learn any more than similar retarded youngsters who had not had the advantage of the special class training. Therefore, their problems were not being circumvented very effectively. Second, roughly twice as many Blacks and three times more Chicanos than would be expected from their proportions in the community populations were found in the special classes. Thus special classes were seen as a tool for segregating minority students. Third, parents were seldom consulted about placement or programs. Placement was often seen as arbitrary and authoritarian. Fourth, mental retardation was determined by the use of tests which do not measure the learning potential of minority children with any real accuracy so there arose serious questions over whether they were retarded at all. Fifth, jobs for which the youngsters were trained were low level, menial and dead-end jobs,

particularly for minority youngsters. Sixth, labeling was thought to diminish the life chances of the youngsters.

Recently there has been some movement to dispense with special class efforts because they are presumed to be outmoded, ineffective, and unfair.

Many people claim that research demonstrates that regular class placement results in greater academic progress than special education placement. A significant fact in the believability of any study is the fair play operating in any situation where one group is compared with another. Careful reviews of the studies have pointed to the consistent violation of the principle of random assignment in nearly all the studies. The only study which stands the test of experimental design acceptability is the 1965 study of Goldstein, Moss and Jordan. These investigators screened all of the entering first grade students in three school systems in Illinois with the Thurstone Test of Primary Mental Abilities. Those youngsters who earned IQ's below 85 were given individual Binet tests and if they again earned IQ's below 85 were randomly assigned to regular classes or special classes. The study ran for four years at which time the special class children were compared with their regular class partners. The findings were impressive:

1. The mean IQ's of both groups rose from about 75 to about 82.
2. Neither group was superior to the other in academic achievement.
3. Neither group was superior to the other on a test of social knowledge.

Thus when youngsters of similar abilities, assigned in a non-biasing manner to special and regular programs, were compared after four years of school experience, they appeared to profit equally.

Special classes were no more efficient than regular classes in raising the IQ, teaching academics or teaching social information, but neither were they less efficient. Phrased in another light, the youngsters were not penalized academically nor intellectually by special education placement.

My concern, however, is not the intellectual or academic treatment of the retarded. I am not impressed with a program that raises the average IQ from 75 to 82 because I find great difficulty in detecting a noticeable educational difference between a child with an IQ of 75 and one with an IQ of 82. I am, however, impressed that the essential elements which are critical to independent living and successful working are non-intellectual and social skills. In this regard, even though the studies are heavily weighted against showing any kind of positive results accruing to special class placement, the studies report greater social gains among special class youngsters than those from regular classes.

I would further submit that the efficacy studies have used the wrong criteria. I here contend that the critical factors in judging the worth of our efforts are in job performance, not academic achievement. In this area the research is very clear. The Porter and Millazzo study of 1958 compared the adult performance of twelve retarded youngsters with special class backgrounds to twelve retarded youngsters from regular class backgrounds. Seventy-seven percent of the special class youngsters were employed versus only 17 percent of the regular class young people. Chaffin's 1967 study was even more convincing--although 65 percent of the youngsters in his program in Kansas City were able to secure employment without benefit of special

class training, 91 percent placement (a 50 percent increase) was achieved as a result of a good work-study program. Recent conversations with Fount G. Warren in Grand Rapids, Michigan, indicate nearly 100 percent success for his youngsters from his work-study program, and John Kidd in St. Louis County claims about 85 percent success. I have never encountered a single shred of evidence which suggests that regular class placement results in a better or more successful worker than those from the special classes. On the contrary, everything suggests the product from the regular class is inferior in this area.

Follow-up studies on the living patterns of retarded adults are equally impressive. The studies of Baller (1936) and Charles (1953) of Nebraska in the 1930's and subsequent follow-ups of the same group twenty years later reveal a picture of well adjusted, responsible, employed individuals who raise families and live much like any other groups of people. They show somewhat less mobility and greater job stability but generally are not quite as active in civil affairs as non-retarded groups. This is a consistent finding confirmed by Ruby Jo Reeves Kennedy (1962) in Connecticut and others. Almost regardless of the source of the research, employment was found to be a reality for from 85 percent to 95 percent of the youngsters in the program so there was no question about the efficacy of the secondary work preparatory programs. Such programs were almost spectacularly successful and our accountability record is something to be proud of. Some of the conditions surrounding this success were not so encouraging however.

Dinger (1961) followed up his students some four years after they had finished his high school program in Altoona, Pennsylvania. Of those

he could locate about 85 percent had jobs and 42 percent earned more than the beginning salaries of teachers in Pennsylvania at that time. However, over half earned a salary equal to or less than what is considered a poverty or bare subsistence level. Thus although employment was a reality, the level of job held by the retarded was apt to be menial. Findley (1967) examined the economic condition of former special education students in Texas and in Colorado. He found that the retarded as a group managed their financial resources in about the same manner as non-retarded persons; some were frugal and some were not. Some rather notable findings were uncovered however. Although all of the former students who were employed would return the actual cost of their high school program in less than ten years from the income tax they would pay, there was a distinct difference between the best and the poorest students. On the average, the better students earned wages which were $1,000.00 a year higher than the poorer students, were easier to train and place, and were reported by employers to do a better job. The dividing line seemed to be related to IQ scores. Thus the IQ as an indicator of employability was useless between 40 and about 85 IQ. But the dividing IQ for selecting good and poor students was about 60 to 65 IQ. This meant that traditional IQ levels for classifying trainable versus educable mentally retarded youngsters did not hold when employability training was involved. The traditional cut off point of 50 IQ was at least ten points off and probably should be nearer to perhaps 40 or even lower. Thus public school officials were quite likely under-estimating the training potential of youngsters when an IQ of 50 was used as a cutting score. At the other end of the scale, it seemed reasonable to conclude that the EMH population was not

homogeneous in regard to training, and therefore both length of time and complexity of requirements could be readjusted for the higher (60+ to 85) or lower (40 to 60+) groups. Homogeneous special classes which housed students with IQ's from 50 to 80 simply were not homogeneous. Thus training programs geared to that assumption were misdirected.

Another myth treated as truth had to do with the notion that social incompetence was the chief deterrent to job success. This apparently had its genesis in the work of Harold Michael-Smith's (1960) questionnaire study of employers' expectations of handicapped employees and reports from England by Tizzard and O'Connor (1950) and Clarke and Hermelin (1955) documenting social incompetence as causes of job termination. In Kansas City, Jerry Chaffin and James Payne used some rather ingenious techniques to investigate the effects of social phenomena on employment. One was the investigation of the "Jack Armstrong, all American boy" syndrome. This bit of wisdom held that good grooming was a critical variable in employability so Chaffin and Payne arranged to send two students out to apply for each job opening, one well groomed, the other not. As is so often the case, they found that grooming was specifically related to the job and that the "Jack Armstrong principle" did not hold. That is, if the job was a relatively clean one, the neat student was preferred. If the job was a dirty one, the not so fastidious one got the nod. Thus training had to be made to be cognizant of job conditions, not based on the belief that cleanliness was next to godliness.

Next they investigated the relationship of social behaviors to employers' ratings of employee effectiveness. They first got employers

to identify good and poor workers with accompanying reasons why the employers thought the workers were good or poor. They discovered that employers nearly always described poor workers in social terms and as careless, lazy, uninterested, inattentive, etc. Unknown to the employers they then used operant conditioning techniques to accelerate the production of the poor employees. Within a matter of a few days, employers' ratings reversed themselves. Employees formerly rated good began to get poor ratings and vice versa. This was expected, but the reasons given for the ratings were not. Virtually all of the reasons given by the employers were couched in social terms rather than being related to production. Apparently the employers were quite willing to attribute poor work to social causes but not to production. The demonstration that the employers would tolerate workers of very inferior social manners provided their production was satisfactory was a corollary to the first finding. Together, they cast serious doubt on the relative importance of social behavior on the regard in which the employer held his handicapped workers. Production was clearly preferred to charm.

With the discovery that social behavior was not necessarily the most important aspect of holding a job, came the gnawing suspicion that perhaps the retarded might be capable of performing jobs of greater complexity than those they were typically trained for. The evidence for this came from many sources. Ruby Jo Reeves Kennedy (1962) followed up a group of retarded persons, originally studied by her in the 1940's, some twenty years later in the 1960's. Among her many findings was the discovery that these retarded individuals had advanced steadily in their jobs and over the years had demonstrated the ability to do rather

complex work of a semiskilled and skilled nature. Some even owned and operated their own businesses. Similar information came from the follow-up studies of Baller, Charles, and Miller some thirty years after their original work had been done in Nebraska. In the meanwhile contemporary training programs in Michigan, in Kansas City, in Minneapolis, and in Texas reported successful employment of their students in semiskilled and sometimes skilled occupations. It seemed evident that as a profession we were underestimating the abilities of that large group of people we called the mentally retarded. An additional bit of discomfort came from the feeling that perhaps our training programs were contributing to this underemployment problem. There was a good deal of observational evidence that placement counselors often were placing youngsters in whatever jobs were available rather than trying to place them in jobs more suited to their abilities and interests. Somehow it did not seem reasonable to believe that every mentally retarded male could only work in low level food service or janitorial jobs or that all the girls were destined to be motel maids or dishwashers. Suddenly it seemed terribly important that training and placement be substantially improved before our practices became so stereotyped that only a revolution of major importance could change them.

For many years the avowed purpose of programs for the retarded was vocational in nature. In the early programs, no real preparation for teaching vocational skills was ordinarily provided teachers in their own teacher preparation experiences. Furthermore, most state departments of special education or the equivalent made no distinction between certification to teach the retarded at the lower age level and at the

prevocational and vocational levels. Any successes scored in the vocational training of the retarded was certainly not to be credited to the training programs of the colleges and universities or to the enlightened guidance of state departments of education.

In 1952 the Federal Vocational Rehabilitation regulations were liberalized to allow that agency to recognize mental retardation as a serious obstacle to employment. This meant that vocational rehabilitation counselors were permitted to provide agency services to this very large group of people who had previously been excluded from this source of help. The actual extent to which service was supplied was limited at first but dramatically increased when the state of Texas, under the leadership of Charles Eskridge, began to assign vocational rehabilitation counselors to work with the schools in the training, placement, and supervision of mentally retarded young people in community jobs. This innovation caught on nationally for two reasons: First, job placement and supervision were now being done by people trained to do that work rather than by people trained as teachers of academic subjects; and second, additional personnel were added to school faculties (at least as adjunct staff) to do a critically important job at no, or very little, additional cost to the school. The service has become so widespread that nearly every school that has a vocational program and is located near a local office of vocational rehabilitation is likely to have some kind of service arrangement with that office. It has been a nearly universally mutually rewarding arrangement.

In order to be sure the schools were not under-training students, in 1963 Congress passed the Vocational Education Act, which allowed handicapped youngsters to enroll in regular vocational education pro-

grams in the schools and in 1968 the amendments enlarged and clarified the mechanics of this kind of inclusion. It was heady legislation for special educators. Dear to the heart of the then President, Lyndon Johnson, vocational education was supported by labor, the godchild of agriculture, and endorsed by educators. It was well funded by Congress and gave every promise of enjoying an ever improving position on the American scene. Most important, it provided that 10 percent of the federal funds were set aside for the education of the handicapped and 15 percent for programs for the disadvantaged. Since these two groups were often overlapping, it seemed possible that considerable funds might be channeled into educational programs for the handicapped. Furthermore, it specified the makeup of a National Advisory Council which was required to be duplicated in each state. In addition, every state was required to present a state plan for implementing the 1968 amendments over a five year period and to update the plan with the submission of annual reports. This is what many had been dreaming of: The legal and moral obligation to provide entree for the handicapped into programs run by vocational educators with support provided by special education personnel, followed by placement, counseling, and follow-up by Division of Vocational Rehabilitation counselors, and jointly paid for by federal, state, and local monies from Special Education, Vocational Education, and Vocational Rehabilitation sources. At last it appeared that the handicapped would have an opportunity to be trained to whatever level of skill they were capable of attaining by people who were really pros in the vocational training field, and their employment options would be materially improved because they would be placed and supervised on jobs by equally able pros, vocational

rehabilitation counselors; and costs would not be a deterrent.

The consequence of these occurrences meant, practically, that professionals in special education could work as equal partners with vocational educators in training retarded teenagers and young adults for jobs and could count on vocational rehabilitation counselors to at least participate in and often take the leadership for job finding, placement, and supervision after the students had been trained. It also assured that funds to support the efforts would be made available. Possibly of even greater importance was the fact that the 1968 amendments applied to all handicapping conditions; consequently, it would not be necessary for a youngster to be designated as mentally retarded in order to qualify for help. This allowed schools who do not use specific categorical labels to serve youngsters who need help under an amorphous umbrella term such as educationally handicapped or disadvantaged. This essentially meant that large numbers of youngsters who need the services but had been precluded by failing to qualify for inclusion under a specific label, such as deaf or mentally retarded, could now be included in the program and provided with the extra help they need to insure success.

The 1968 amendments changed the concern and responsibility of vocational education in rather dramatic fashion by emphasizing services to groups of people who generally had not been served in the traditional vocational programs of the past. They also recognized the fluid nature of life styles in America, which emerged after World War II. No longer did people who were born in one area grow up, work, marry, grow old, and die in that same area, nor did people remain for a lifetime at a single job. More likely, an individual would have a succession of

jobs throughout his employment career, some of which might not have even existed in his youth and many in parts of the world a long way from his birthplace. This recognition spawned a new conceptualization of vocational education as just one element in the total career of a person and launched vocational educators into some new areas with few precedents to guide their efforts--namely, Career Education.

Unfortunately, the concept of career education has often been misunderstood by people who insist on equating it with vocational education. The two terms are not synonymous. Hoyt (1974) has attempted to clarify the concept. He defines education as "all those activities and experiences through which one learns," and career education as "all those activities and experiences through which one learns about work." Career is the totality of work a person does in his lifetime, whereas a vocation is the primary work role a person has at any given point in time.

Work is a concept that is restricted to human beings in that it is a conscious effort aimed at producing some benefit and is something one chooses to do. Labor may also produce benefit, but the element of choice is missing. Labor is forced, work is not. People, therefore, work because they want to in order to fulfill some rather basic human need. Principally, people work to earn money to purchase goods and services that are related to living. This is a basic reason given by many people when asked why they work. But there are other reasons too. Our complex societies simply could not survive if most of the people in the society did not work. Indeed, some people equate good citizenship with work by contending that one who does not work is not contributing a benefit to others and is not, therefore, a worthy citizen. Children can

be tolerated because they will work and the aged because they have worked, but able-bodied people of working age who do not contribute are considered bums. A third reason people work is psychological. This generally means that people need to feel that their contributions of some benefit to the world makes them needed. It makes a person feel that his life is worthwhile, that it matters whether he lives or dies because he is contributing something to make the world better than it would have been had he not been here.

Hoyt maintains that career education encompasses all three basic reasons for working: economic, societal, and psychological. It is this breath of the concept that mandates that work be considered a human right and not just a societal obligation.

The skills and knowledges that constitute vocational skills are made up of learnings and behaviors that have their origins at an early age. Specific understandings of the world of work are largely attitudinal. Thus it is proposed that attention be given to the development of attitudes concerning the dignity of work, beginning at the preschool level. The program at the preschool, primary, and intermediate levels should concentrate on experiences and incidental learning that emphasize calling attention to occupations in the scope of adult activities, developing skills that are vocationally directed, and learning behaviors that will contribute to future occupational placement and job retention. These find their focus in career awareness.

At this awareness level a number of people have used job surveys to identify potential jobs that the youngsters can be made aware of through especially prepared materials. The state of Wyoming, for

instance, sponsored the development of decks of cards with microfilm information on jobs. The project is called WORK, an acronym for Wyoming Occupational Resources Kit. Each card has a picture of the job and information about the job including the family, level, requirements, skills needed, pay, fringe benefits, availability, and location of the job. Some include a kind of self-test to let the student decide whether the job description fits his own interests, needs, and talents. Similar materials published by educational publishing companies appear almost daily. Many of these materials include written, pictorial, cassette tape, and other multimedia presentations. Almost uniformly they are of very high quality but vary considerably in their suitability for the handicapped.

At the prevocational level and continuing at the vocational level, the individual should be exposed to carefully supervised work experience of increasing complexity. The accompanying study should deal with instruction designed to further his skills, knowledge, and positive attitudes, toward helping him find his place in the world of work. The prevocational program (usually housed in a junior high school building) should provide for up to a half day of work exploration experience and the remainder of the day devoted to related instruction. This should begin about age 14 or 15 and preferably somewhat earlier, if possible. The initial introduction to work should be of a sheltered variety. That is, it should be under the control and supervision of the school. This may be obtained by purchasing evaluation services from an already-established sheltered workshop, by assigning the students to a school-operated sheltered workshop, to school campus jobs in the cafeteria, to janitorial, office, or garage

duties, or to the establishing of simulated work stations in a classroom.

The exploration phase has generated its share of new materials also. Of principal interest are those systems developed principally for the retarded. The Jewish Employment and Vocational Services (JEVS) in Philadelphia evolved from the need for activities that were suitable for people of rather limited abilities to determine what kinds of training activities might be best to utilize in the preparation of the person for employment either in a sheltered workshop or in competitive industry. It consists of 110 work samples carefully selected for their relevance to jobs done by the retarded. Normative information on what is competitive performance is provided for each task.

The Singer Corporation has developed a series of film strips with accompanying narration on cassette tapes which are auto-teaching devices that guide a youngster through the exploration of a job. Each job has a work station setup with appropriate tools and with real or simulated job tasks which the youngster performs on instruction from the tapes and filmstrip. Since both of these are under the control of the individual, he can proceed through the exploration at his own rate and with minimal supervision from the teacher. The job explorations include the use of the Dictionary of Occupational Titles, basic tools, bench assembly, cooking and baking, cosmetology, data recording, drafting, electrical wiring, engine service, masonry, medical service, office and sales clerk, refrigeration, heating and air conditioning, plumbing, sample making, sheet metal, and soldering and welding, and new ones are continually being developed. Perhaps one of their strongest features is the individual nature of the experiences. At the same time

it could be construed to be a weakness since only one person can use each station at any one time.

One aspect of the exploration phase that has received too little attention is the determination of a student's vocational interest. One major aim of this phase of the program has grown out of the discovery of how little most youngsters know about the incredible variety of ways people earn a living. The consequence of this condition is that most of the youngsters have vocational interests in only a few areas because they know about very few jobs. The aim of the program has been to try to broaden the knowledge about jobs and therefore the interests of the youngsters.

Since reading is not always a reliable medium to use to get information for many retarded youngsters, efforts to determine the vocational interests of the retarded have centered on picture representations. One of the first attempts was reported by Parnicky, Kahn, and Burdett (1965). By use of uncomplicated drawings of people working, the authors attempted to determine the relationship of the youngsters' interests and experiences. Not unexpectedly they found interest and experience related, but they were unable to make any predictions from the inventory. Subsequent standardization of the Vocational Interest and Sophistication Assessment (VISA) on some 3000 subjects confirmed their earlier hopes for developing a stable instrument but still provided only minimal predictive validity.

A somewhat different technique was presented in a multiple choice picture interest inventory developed by Becker (1973). The Reading-Free Vocational Interest Inventory (RFVII) consists of pictures presented in triads. A forced-choice technique required the respondents

to choose only one of the three pictures in each triad (55 triads for males and 40 for females). Although the reliability and concurrent validity seem good, there is not enough information on the predictive quality of the inventory to be confident that it is a good instrument. However, both VISA and RFVII appear to be worth trying since they offer some choices the youngsters may not otherwise be aware of. The history of interest inventories is short, but it is much too promising an area to ignore.

The preparation phase typically is housed in a high school building because the youngsters are ordinarily at least 16 years of age. If in the prevocational phase they have identified an area in which they have an interest or a talent, they may wish to start their training for placement rather soon. On the other hand children who are rather immature or undecided may wish to be allowed somewhat more time to find themselves. This should not be seen as a real problem, although it is likely to be so viewed by a great many teachers.

In the preparation phase, many schools are now making better provisions for serving the handicapped in their ongoing vocational education programs than they did in the past. Ideally, these programs provide modification within the regular offerings so the handicapped are not unduly penalized by their disabilities. At the very least, special sections can be offered which enroll mostly those youngsters who manifest some problems in full participation but can, with time and help, develop the requisite skills required for entry level in an area.

The conceptually brilliant plan of the 1968 amendments of including the handicapped in ongoing vocational programs began to tarnish almost as soon as it was tried out. No one had reckoned with the possibility

that not all people had an equal commitment to serving the handicapped. And no one had considered the consequences of sharing responsibility equally among three disciplines with neither one clearly responsible for the success of the services. Even at the planning level problems were quick to develop. Some states had representatives on the state advisory level who, while they were interested in the vocational problems of the handicapped, they were not very knowledgeable. Some state plans, therefore, paid scant attention to problems of implementation appropriateness or the assignment of responsibility to people of demonstrated skill in working for the handicapped. Unfortunately this was sometimes undetected and even confounded at the national level because the plans were not reviewed by personnel from the Bureau for the Education of the Handicapped. The quality of services for the handicapped therefore varied enormously from state to state and from one locality to another. My term of service on the National Advisory Council was for only one year, but even before that short term was up, it became apparent that something else had to be done if the intent of the 1968 amendments were to be realized.

One rather fortunate consequence of the 1968 amendments was the precipitation of a dialogue between leaders in the Council for Exceptional Children and the American Vocational Association. From this dialogue came the recognition of the need for much more personal contact between people in special education and those in vocational education with a focus on the problems of providing good training opportunities for the handicapped.

The concept of career education had been suggested by some members of the National Advisory Council as a way of broadening the influence of

vocational education which had not enjoyed a position of very high prestige among educators in general. When Dr. Sidney Marland embraced career education for the Bureau, the entire range of grade levels now were to be tied together in a concerted manner with a minimum goal of providing each individual with skills which would enable him to earn a living upon leaving school.

The form of career education, although not the name, had been the major curricular thrust of education for the handicapped since the early 1900's. Therefore no change had to be made by special educators to accommodate the idea. For both special educators and vocational educators conceptual compatibility was an accomplished fact. What remained was a need to demonstrate this fact for all to see.

To advertise this agreement, in February 1973, a national topical conference on career education for the handicapped was co-sponsored by the Council for Exceptional Children and the American Vocational Association. The heads of the Bureau for the Education of the Handicapped and the Bureau for Adult, Vocational, and Technical Education in addition to the presidents of the C.E.C. and the A.V.A. all emphasized the same theme: their mutual commitment to cooperative programs for the vocational preparation of the handicapped. To underline this statement, reports about programs from all over the country were presented by people who ran the programs. Stated intentions and described activities were impressive, but it was painfully apparent that programs of mutual commitment were more the exception than the rule. The mutual commitment evident at the national level simply had not caught on locally.

Fortunately, Dr. George Klinkhammer of the B.E.H. had become convinced that one way to encourage cooperative programs between people in Special Education, Vocational Education, and Vocational Rehabilitation was to describe successful programs so others might emulate them. A plan was developed to prepare technical manuals and a contract to do the work was subsequently awarded to Management Analysis Center, Inc., of Washington, D.C. The contract stipulated that outstanding programs would be identified, analyzed, and described in detail so they could be transplanted to other locales and other climes for the mutual advantage of all.

MAC had solicited nominations from state directors and other knowledgeable persons to compile a list of outstanding programs from all over the country. Some 300 nominations representing every state resulted from this search. Rather extensive questionnaires followed up by telephone calls provided descriptions necessary for a blue ribbon panel of experts to screen the programs from 300 down to 30 of the best based on the criteria of completeness, effectiveness, and replicability. These 30 were then site visited by MAC staff with one of the educational consultants. Guided by a carefully prepared structured interview form, an exceedingly detailed picture of each program complete with pamphlets, record forms, and budget figures was secured. These were then presented to the advisory panel experts for evaluation and final selection.

The manuals were supposed to describe one program for the severely handicapped in a segregated setting, a segregated program for the mildly and moderately handicapped in a public school setting, and an integrated public school program for the mild and moderately handicapped. It became very clear to all the people involved that a

great many unique, not to say ingenious, practices would never come to light if only full programs were described. It was decided, therefore, to include some of these exemplary practices in another manual so practitioners everywhere could benefit from the experiences of others.

The chance to study excellent programs from all parts of the country, to actually visit a good many of them, and to participate in writing the technical manuals, provided an opportunity for a re-evaluation of the relationship of career education to the handicapped of unrivaled clarity.

First of all, it became apparent that there were practices which differentiated effective from ineffective programs. These included such things as carefully planned systematic sequencing of activities from one part of the program to another, efficient management, accurate and careful record keeping, and clearly understood objectives. All of these are identified and explained in the technical manuals on Career Education which may be obtained from the U.S. Government Printing Office. But there were other, less tangible, things which made a difference in the program operation.

The settings within which programs were housed ranged from dingy, decrepit, ancient, school buildings which appeared to be held together primarily by tradition, spider webs, and habit, to the most modern brick, chrome, and glass structures designed specifically to facilitate training programs. Excellence was no respecter of facilities. Good programs could be found in wretched surroundings and poor programs might be housed in opulence.

Likewise materials and equipment ran the gamut from the slickest products of the commercial markets to homemade "Rube Goldberg

contraptions" invented to help the handicapped perform more effectively on a particular machine or academic problem. Program plans ranged from casual directions like, "Work on these boxes," to careful behavior counts taken under controlled time constraints, plotted on special graph paper, and then translated to training for specific behavioral outcomes totaling as many as 800 to 1000 acts. Although there is generally a positive relationship between preparation and accomplishment, the relationship is far from perfect. Learning is a personal thing, very much a function of the investment of the learner and not necessarily the investment of the business manager.

The one area in which there was a common bond between programs was in the concern of their personnel. Regardless of whether they were called counselors, behavior modifiers, teachers, shop supervisors, case managers, training aides, or anything else, they cared about the welfare of the students. Wherever this concern was evident, good things were happening to the students. The students learned what they were supposed to learn, behaved in a manner appropriate to the situation, matured in their skills of self-discipline and self-management, and developed a respect for themselves consistent with their age and abilities. Where not caring about the students was detected, program effectiveness was dramatically reduced. This was a universal. However even among those good programs where people cared about their charges, some quite substantial differences were evident, particularly in the way they carried out specific functions.

To get students into the programs some kind of outreach with feeder programs was carried on. This might be as uncomplicated as having the teacher or director visit the feeder programs to talk with

them about what kind of training would be available in the next stage of training. This kind of contact was sometimes supplemented by having mature students do the visiting and talking rather than the teachers. Some places sent mobile labs (especially designed and outfitted trailers) which would be parked at a feeder school for a given period of time to allow students to make use of the facilities to evaluate vocational interests and skills. This was done in Sicklerville, New Jersey, and Memphis, Tennessee. In Tucson, Arizona and Peoria, Illinois the DVR counselor called upon the youngsters in the feeder schools and officially accepted them as rehabilitation clients even though they had not even begun the vocational exploration part of their training. Part of his job was to alert the teachers in the other parts of the program to any special problems which might need special attention when the youngster advanced to the next part of his program. A similar function was performed by the case manager in the Cooperative School Rehabilitation Center of Minnetonka, Minnesota. The chief difference, however, is that the case manager was an employee of the center whereas the DVR counselor is an employee of the state.

One of the functions of the outreach process has been to develop a pre-admission plan for each child. Data from tests, teachers and supervisors' reports, parents, medical personnel, agency record, and often an extensive interview with the youngster are combined and evaluated so a tentative training plan can be formulated before the youngster appears for training. After admission, quite a few programs held a post admission re-evaluation from four to six weeks after entry. This has many advantages, but one of the more obvious is that the suitability of the plan can be determined before too much time is lost

on an inappropriate plan or on one in which the students has neither interest nor talent.

Another universal among good programs was a fixed responsibility for monitoring progress. This was done in many different ways, but there was never any ambiguity about who had the responsibility. Buck passing was virtually impossible, thus children did not get lost in the crevasses of indecision. In the CSRC program of Minnetonka, the case manager had this responsibility. From outreach, to training, to counseling, to placement, to follow up, he had to plan and supervise the implementation of every aspect of the youngsters' experience.

In South Bend, Indiana, four teachers team teach in an open classroom setting with 60 students. Every youngster is the responsibility of one of the teachers, and a head teacher supervises the other members of the vocational team. Work experiences and sometimes work placement and follow-up may also be included. Thus the team is all involved, but one teacher carries major responsibility for monitoring the progress of the students.

The formality of the program plans varied enormously from place to place even among effective programs. These may include formal, commercially prepared plans such as the Progress Assessment Charts (PAC) developed by H. Gunzberg in England or as many as 800 behavioral outcomes developed by teachers in specific programs such as New Opportunities for Work (NOW) in Findlay, Ohio, or those of the Florida Behavioral Outcomes Project for the trainable. Production standards may be used such as those in the Vocational Training and Education Project in Tucson or the Kent County, Michigan program or any combination of those practices may be used. Effective programs have in

common some kind of objective data derived from performance which is used to determine when people have completed their training. Thus placement decisions are based on accomplishment, not on good intentions, pleasant manners, or longevity.

Perhaps most important, effective programs all seem to do something which result in a positive self-concept of the student who goes through the sequence of training. This may be accomplished by a Special Needs Team such as that of the Eastern Nebraska Community Office of Retardation (ENCOR) or the remedial center of Huntington, West Virginia, which develop supportive remedial programs to strengthen weak academic areas, or pure counseling programs designed to change attitudes as in the Tucson or Minnetonka programs, or the use of outstanding students from the regular high school who act as "big brothers" or "big sisters" as is done at Carl Hayden High School in Phoenix, Arizona.

Finally, the student who goes through the program is never forgotten. Some kind of follow-up insures his continuing satisfactory performance, provides opportunities for training for more complex jobs, or simply provides a resource he can turn to for help in time of need. This may be done by a formal follow-up procedure or just by maintaining an open door policy for all former students, but it is real and it is effective. The interest in and concern for students is not transitory, it is deep and continuing.

To study the effectiveness of the 1968 amendments to the Vocational Education Act, the Olympus Research Corporation examined some 92 vocational education programs in 1975 and reported:

Despite a policy to integration,

> Of the students enrolled in the program, 70 percent were in special classes. . .there were several reasons for lack of implementation: (1) reluctance of instructors to accept handicapped students, (2) inability of instructors to teach the handicapped, (3) lack of individualized instruction techniques in most projects, and (4) referral (into the program) of individuals who could not succeed in advanced skills training classes.

They went on to say:

> Is integration the best policy? There appears to be a real danger that handicapped students will become lost in regular classes, or that they will not receive the special support they need from instructors and students of regular classes.

Additionally, they found many schools mixed the handicapped and disadvantaged either because of size or because of funding. They observed:

> Since the educational needs of the disadvantaged and handicapped are usually different, and since the disadvantaged, understandably, were often humiliated by being placed in classes with the mentally retarded, the mixing of the mentally handicapped with the disadvantaged is indeed a questionable practice.

There is nothing more unequal than providing equal opportunities to people of unequal abilities. And there is nothing more unjust than judging programs as being good or bad based on a philosophical principle rather than how they serve the needs of children.

John Kidd has suggested that mainstreaming is a desirable practice depending upon the domain of the disability. If the problem is effective, then mainstreaming can occur when the behavior problem has been controlled. If the problem is psychomotor, mainstreaming can occur when the ambulation problem has been eliminated. However if the problem is cognitive, mainstreaming may be the logical goal for post school behavior with a separate stream of educational experience the logical requisite process for the post school mainstream product.

There seems little doubt that for effective practices to become well publicized, some of the intentions of the 1968 amendments to the 1963 Vocational Education Act must be realized in a larger number of schools than has been the case in the past, but I am not optimistic that cooperation between Special Educators, Vocational Educators, and Rehabilitation Counselors will soon become universal. There are several reasons for my concern. First, I know of no effective way to legislate the emotion of genuinely caring about the welfare of handicapped youngsters. Most special educators, rehabilitation counselors, and vocational educators do care, but some do not share this concern. Where any or all of these professionals do not incorporate this concern into programs, effectiveness is short-circuited. My second reason for concern is somewhat more subtle, but just as potent. Vocational education has traditionally been committed to selecting quite able students who are then trained in both understandings and practical skills which form a basic foundation for developing complex skills demanded by a highly industrialized society. Thus the training is aimed at entry level vocational skills supplemented by conceptual understanding of a rather high order. To special educators, the vocational skill training is an attainable goal for the handicapped, but conceptual understanding is less realizable, partly because of the limited ability of the retarded to read, write, and do arithmetic, but more crucially because mental retardation is most fundamentally demonstrated by an inability to perform at hypothetical or propositional thought levels. Mentally retarded individuals are not just slow learners, they are unable to process information intellectually beyond a rather concrete or simple

abstract level. Thus the application of physical, mechanical, electrical, or chemical principles to vocational problems is not very feasible, nor is this kind of deductive reasoning readily amenable to instruction. Thus a part of the training felt to be important by many vocational educators is not likely to be learned by the retarded and some vocational educators are likely to feel frustrated because they cannot be as effective in their programs as they might like to be. In addition, adjustments in the training programs to accommodate the lack of conceptual understanding of the retarded often means a considerable burden is placed on the teacher as he tries to adjust for the rather broad individual differences and to accept quite diverse levels of achievement within the same class. Not all teachers are flexible enough to adjust their expectations to the ability of the students. A third problem is that of who will take the major responsibility for the students' program. When everyone is responsible, it often happens that no one really takes charge. On the other hand, when one person is in charge, then the others may or may not feel any sense of responsibility to somebody else's student. This uncertainty of commitment can lead to either a power struggle as each tries to fill the vacuum created when no one has a clear mandate for action, or nearly complete chaos as everyone waits for someone else to act. Neither condition does much to further the lot of the handicapped. Fourth, the emphasis on mainstreaming the mentally retarded in regular programs effectively changes the curricular focus from one of developing skills of independent living and vocational efficiency to demonstrating academic achievement. Thus the outcomes of the educational efforts become vaguely identified with success in

classes in the sciences, English, math, history, and the like, rather than being related to the ability to get and hold a job and maintaining oneself as an independent, responsible adult in society. As the goals for the handicapped lose precision, there is an increasing possibility that the efforts will become diffused and the program will suffer accordingly. Mainstreaming is a trend of no inconsiderable moment, so the problem is not one to lightly dismiss, particularly since it could result in a drastic change away from a vocational program which has a rather remarkable success record, to an academic program of uncertain consequences.

There seems little doubt that the future of secondary programs for the mentally retarded will depend upon a great many factors, but most important will be the interactions between professionals in special education, vocational education, and vocational rehabilitation. In order to make good things happen between these groups, it is important to start at the top. In this case, that means the National Advisory Council for Vocational Education. It is probably too much to hope for that every member representing the interests of the handicapped should be selected on his credentials of experience and concern for the handicapped. This probably has a better guarantee of occurring if personnel from the Bureau for the Education of the Handicapped play a major role in selection.

At the next level, plans developed by the Advisory Councils of the various states are forwarded to the Bureau of Adult, Vocational, and Technical Education for review. It would be to the advantage of the handicapped if personnel from the Bureau of Education for the Handicapped were included in the review process. Additionally, it

would seem important that the person representing the interests of the handicapped on the State Advisory Council could be selected by people from the department of special education of the respective statesusing the criteria of training, experience, and interested in the career welfare of the handicapped. State plans should specify in detail the responsibilities and functions of special education, vocational education, and vocational rehabilitation personnel, including the financial obligation of each.

Locally, it would be ideal for people from all aspects of the educational enterprise to feel a sense of responsibility for the handicapped. This is perhaps too much to expect but at a minimum there should be a fixed point of responsibility for program planning, implementation, and monitoring for the handicapped.

Given all or even some of the conditions listed, we might contemplate an even brighter future than the handicapped have experienced in the past. Increasing their options is, after all, what has sustained our past efforts and probably will our future ones also.

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DEVELOPING CAREER AWARENESS:

THE FOUNDATION OF A CAREER EDUCATION PROGRAM

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In the United States education has always been one of our national priorities. Schools were apparently started by the early settlers almost as soon as they built homes. It seems pretty evident that the chief reason our forefathers wanted their children to learn to read and write was probably religious. That is, the Protestant revolt that prompted the exodus to America in the first place taught that each person's relationship with God was a personal one, arrived at through unique and individual ways. The avenue to this relationship was holy scripture, so the practical test of literacy was whether a person could read well enough to interpret the lessons of the Bible for his or her own guidance. Thus, the first function of education in the new world was for self-development.

As this country grew and prospered, it soon became evident that education had many more uses than purely religious ones. Trade and commerce, law and government, became partners with religion in their demand for literate citizens. With the coming of the industrial revolution, the need for a labor force that could read well enough to learn to work in harmony with machines which had never before had such an impact on people's lives, added another dimension to the tasks of

education. Education soon became the mechanism for doing three basic things: (a) transmitting knowledge so that each generation is the beneficiary of the wisdom of the past; (b) providing for self-realization so that each person can develop his or her unique abilities and interests; and (c) providing a basis for vocations so people will be equipped to earn a living. Sometimes these purposes of education have been seen as competing ones, but most often they work in the life of an individual in a complementary rather than a competitive manner.

Because education is contemporary, it has functioned not just to preserve the practices of the past, but also to change society by the discovery of new knowledge and the application of fresh understandings. It has never been static. But it was not until recently that education has proposed to change itself. With the advent of career education, education has proposed a revolution in education, for career education is concerned, as you are well aware, not just with assuring that people learn the skills necessary to earn a living, but rather that they learn to make working a meaningful part of living. It is possible to learn work skills for nearly any job at nearly any age, but to learn how to make working a contributing element in our pursuit of happiness is something which must be started early and practiced diligently.

Speaking before the annual convention of the American Vocational Association in Portland, Oregon on December 6, 1971, Sidney P. Marland, the then Commissioner of Education, addressed himself to the scope of career education in these words:

> I do not speak of career education solely in the sense of job training, as important as it is. I prefer, instead, to use career in a much broader connotation--as a stream of continued growth and progress. Career in that sense strongly implies that education can be made to serve all the needs of an American--teaching, to begin with, the skills and refinements of the workaday world, for if we cannot at the minimum prepare a man or woman to earn a living, our efforts are without worth. But career education must go beyond occupational skills--the interpersonal and organizational understanding without which one simply cannot exist in a modern nation-state, addressing effectively the matter of living itself, touching on all its pragmatic, theoretical, and moral aspects.

It is obvious that the kind of education Dr. Marland talked about is a radical departure from what had developed as a traditional academically oriented program that taught people how to read and write. Although there are many reasons why many people have considered such an academic emphasis to be inappropriate in our modern world, one of the major criticisms is that it has contributed to a marked discontinuity between the roles of children and those of adults. Anthropologist James P. Spradley has pointed out that there is no discontinuity when an Eskimo boy helps his father fix a bone tip to a spear and some years later prepares a spear for himself to use in a manner similar to that he learned from his father. The cost of this continuity, however, is paid for in extremely limited choices of occupational roles for adults. By contrast, the virtual absence of child involvement or perhaps even awareness in parental occupational roles is compensated for in our complex industrial society in the remarkable array of options open to youngsters as they enter the adult world of occupations. It is Spradley's contention that career education can lessen this discontinuity by introducing children to adult roles early. It is this aspect of career education we call career awareness. If, indeed, it is to have

the effect Dr. Spradley predicts, it must start well before school age and continue to re-emerge periodically throughout our lifetimes as it addresses itself to the main elements of career awareness: attitudes, information, and self-understanding.

Three Aspects of Career Awareness

Attitude Formation

Attitude development probably proceeds more slowly than any of the other two aspects of career awareness, yet attitudes are the foundation on which the entire career education structure must ultimately rest. Somehow the youngsters must learn that work is a concept that is restricted to human beings. It is a conscious effort aimed at producing some benefit and it is something one chooses to do. Animals do not have that ability to decide what things are good and which are bad. Without that ability, animals cannot make a conscious effort to produce something of benefit--some good. This is a pretty complicated concept to teach to young children, yet it is one which they need to learn if they are to establish a satisfactory relationship with the world of work. They must find out that people work for many reasons. Although most people work to earn money to purchase goods and services that are related to living, the economic reason is only one reason and it is often less important than the psychological and societal reasons. Children must find out that work can be a major source of personal identification and satisfaction and that work is necessary and important. They need to learn that our complex society simply could not survive if most of the people in society did not work. They must find out that people change jobs for many reasons but usually each job provides an additional or some other satisfaction not provided by the previous jobs.

They need to find out that how they feel about themselves has a great effect on whether the work they do will be enjoyable to themselves and even how good they can be at whatever work they choose to do.

Career Information

A second area of career awareness is information. This has as a major focus letting the youngster learn about the incredible variety of ways people earn a living. The impossibility of introducing each and every child to the nearly 2,500 different kinds of jobs at the level which people work is patently obvious. However, the task has been simplified a good deal by grouping the jobs into clusters of related ones. That is, the United States Office of Education has grouped jobs which are related to each other by subject, but not by task. These clusters are:

1. Agri-Business and Natural Resources
2. Business and Office
3. Communication and Media
4. Consumer and Homemaking Education
5. Construction
6. Environment Control
7. Fine Arts and Humanities
8. Health
9. Hospitality and Recreation
10. Manufacturing
11. Marine Sciences
12. Marketing Distribution
13. Personal Services

14. Public Services

15. Transportation

Basic to any of the job clusters are technology fields which support them. In these areas, the children must be given access to the instruction they can understand in each area. Certainly, the level of study can be quite sophisticated in any of the areas, but happily, not all youngsters need that depth of understanding nor do all jobs require that the underlying technology be completely mastered as a prerequisite to successfully working at the jobs. However, at least some information should probably be given in every area. The children should have a chance to learn that the technology of mechanics applies not only to fixing cars, but includes the development and use of tools, both power and hand-driven, connectors, fluid systems, and various kinds of measuring instruments and that this supports the areas of manufacturing, construction, marine sciences, and transportation, to mention just the more obvious ones.

Closely related to mechanics is the field of electricity. Not only the illumination and power aspects, but the whole field of electronics for home and industry can be surveyed. The technology that deals with spacial relations where the principles of geometry and trigonometry are identified in drawings as well as structures emerge in the fields of graphics, commercial art, and construction. The chemical-biological technologies underlie the contents of medicine, food production, agriculture, and ecology as they relate to the human condition. In these times of soaring world populations, this area becomes increasingly crucial. Health and health-related job clusters are certainly part and parcel of this area. The whole area of

communications is supported by the technologies related to symbols. Clerical, business, economics, literary pursuits, and all of education are dependent upon this area. People-related studies including behavior, ethics, etiquette, grooming, customs, and population trends in work as well as in leisure and recreational pursuits are among the newer technologies. Our increasing demand for various services makes this area more and more relevant.

Self-Understanding

The third aspect of career awareness is that of self-understanding. This is certainly as difficult an area as those of attitude formation and job information and just as certainly important as those other aspects. Part of the problem stems from the fact of growth itself. That is, while there may be some people who understand themselves and their relationship to the world even at a very young age, most of us do not. Furthermore, all of us are capable of change, sometime in rather dramatic fashion as when the awkward child grows up to become a graceful adult, so predictions of adult roles made about young children are more apt to be wrong than right. The fact that growth does make people change is a complicating factor, but the most influential variable is the unparalleled environmental influences both in rapid transit and instant communication. We surround our children with media such as television which brings them into intimate contact with people, places, and things on such a regular basis that remote parts of the world take on the familiarity of the local neighborhood. Then we make it possible for them to go to Europe or Asia or South America, or Africa in just a few hours and for a great deal less money than our parents would have paid for a similar trip even 50 years ago. It is virtually impossible

to accurately assess the impact of our communication and transportation systems on the developing self-concept of a youngster, but it simply cannot be less than very substantial. Probably our children pay a high price in cultural discontinuity when they do not follow in their parents' footsteps, but they reap a remarkable array of adult options as a compensation. The challenge is to provide those experiences which will allow the self-discovery to occur which is vital to the intelligent selection of those adult roles which enhance rather than prevent effective living.

Techniques and Materials for Developing Career Awareness

The task is far from simple, but there are techniques and materials that can aid us as we attempt to teach the components of career awareness: attitudes, information, and self-understanding.

In 1970 Dr. Dean P. Talagan, Chief of Occupational Education for the Wyoming State Department of Education, faced this problem of helping the children in the elementary schools of Riverton, Wyoming develop positive attitudes toward work. Using the social studies curriculum as a vehicle, the teachers in the schools together with Dr. Talagan selected attitudes and concepts of the month which, although introduced through social studies, were developed and emphasized in other curricular areas such as language arts and arithmetic. Beginning at the elementary level, they sought to promote positive attitudes toward: (a) all fields of work; (b) work as a means of obtaining many satisfactions; and (c) one's self in relation to work.

The project grew out of the findings that by the second grade, children in a study done by Barbara Gunn in 1967 had learned to

describe occupations in terms of what they meant to them personally, but by the third grade they began to see a hierarchy. Thus, children in the elementary grades already had firm notions about what jobs were desirable and which were not. Furthermore, studies in Oklahoma and California indicated that by the sixth grade, 60 percent of the youngsters had made tentative occupational choices and only 10 percent had no occupational goals. The remaining 30 percent were unsure, but they were not completely goalless. Since choices for occupations, even though tentative, seem to be made so early in the school careers of children, it seemed important to Dr. Talagan and his teachers to begin the career awareness program early. Each month they would concentrate on an occupation of the month. In relation to it they would teach in the first grade various attitudes and concepts. For example, they taught the attitude that there is dignity in all work by using games such as charades to have the children act out the jobs of their mothers and fathers. From the game of charades, they then led to teaching the attitude that work is important. This was done by relating the work of the parents to some service or product familiar to the children.

One of the rather unique features of the program was the use of questionnaires to the parents relating to various concepts. For example, to teach the concept that "people need to be able to speak well in their work," the children took home a questionnaire for their parents to fill out. It was not very elaborate, consisting of only a few questions like, "Do you talk in your work?" "Who do you talk to?" "Why do you talk in your work?" Tabulating the results, the children became quickly aware of the vital part which talking plays in work.

Similar questionnaires dealing with writing and arithmetic helped establish those academic skills as requirements for successful working.

Over a period of months, the children were led to discover that people work in different places and that they get there by different means. They discovered that often people have to work together to accomplish the job tasks and that cooperation is a necessary component in many jobs. As a different job is introduced each month, the children soon become aware that very few jobs are not related to other jobs and that mutual dependency is the rule rather than the exception in our society. Through a broadening of the occupational areas studied, the children are introduced to the attitudes of pride in accomplishment, the personal satisfaction and dignity to be found in work well done, an appreciation of quality in work, a recognition that without cooperation some jobs could not be done, an understanding that work requires adaptability, dependability, and responsibility from workers and that from this comes loyalty to employers and organizations who return fair treatment and appreciation as their share of the bargain. These attitudes and understandings are introduced early in the elementary grades and they are repeated often throughout the entire kindergarten through sixth grade span.

The finding from numerous studies that elementary grade level children are only slightly acquainted with the various kinds of jobs even in their own communities, led Dr. Talagan and his teachers to develop an inventory of jobs in Wyoming. Called WORK, this is an acronym for Wyoming Occupational Resources Kit. It is a deck of cards on which various jobs are described. Using a microfiche format, each card describes a job in terms of the kind of work performed; the

condition of work such as whether it is inside or outside, hot or cold, dirty or clean, dry or wet; the kinds of skills people need to perform the job; any licenses needed; special health requirements; how to apply for the job; future employment outlook both in state and out of state; special educational requirements; job entry level; earnings; personal grooming requirements; and where to find the job. The WORK cards are supplemented with various commercially prepared materials and with the materials from other projects such as VIEW (Vocational Information for Education and Work), but these are not made readily available until the youngsters are older and can read well enough to use them properly. For many of the mildly and moderately handicapped youngsters, this is at about junior high school level.

Although the awareness phase of career education is ordinarily associated with lessons in the elementary grades, we should remind ourselves that we can learn about new kinds of occupations at any time in our lives. Career information, therefore, is an integral part of the curriculum at both the junior high and senior high school levels. Because handicapped youngsters typically have some fairly well developed learning skills by this time, the commercially prepared materials become much more usable. The Fearon Publishing Company of Belmont, California has developed The Job Box. It consists of descriptions of 70 kinds of jobs grouped under seven job clusters. Liberally illustrated with action pictures of people working at the jobs, the descriptions are written at a 2.7 grade level of reading and are presented in a common format. The subjects covered are: (a) The Job, (b) You Should Know These Things (which describes the conditions of work), (c) Classes to Take, (d) Can I Get On-the-Job

Training?, (e) Where Can I Find the Job?, (f) How Much Will I Be Paid?, (g) More About the Job, (h) Where Can I Train For This Job?, (i) People to See, and finally (j) Things to Ask Yourself About This Job.

The first cluster is automotive. It describes jobs such as Assistant Auto Mechanic, New Car Dealer, Tire Service Man, and seven other similar jobs. The Building Trades and Construction cluster describes jobs like Carpenter's Helper, Glazier's Helper, Insulating Worker, Roofing Worker, and eight other jobs. Food Services describes jobs such as Baker's Helper, Fry Cook, and Waiter or Waitress, plus four other similar jobs. The Industrial and Retail group has ten jobs. Among them are Air Hammer Operator, Box Boy, Local Truck Driver, Stock Clerk, and Warehouseman. The Office and Clerical cluster describes only five jobs: Duplicating Room Worker, File Clerk, Library Assistant, Messenger, and School Office Worker. Included in the cluster of jobs related to Ranching, Farming, and Horticulture are twelve jobs. Such jobs as Cattle Ranch Hand, Ditch Tender, Milker, and Park Ranger's Assistant are described. The seventh cluster, Trades and Services, has fourteen jobs including such things as Antenna Installer, Child Care Worker, Hospital Maid, Presser, and Veterinary Attendant.

The Finney Company of Minneapolis has developed a series of booklets each of which describes a job, tells what a person can earn on the job, what conditions to expect, the working hours, what an employee does, what the job is like, both good and bad things about the job, ways to get the job, sources for free information about the job, and a self-test that poses the question, "Is this job for me?"

There are four units, each containing five volumes which describe twelve jobs per volume. Thus a total of 240 jobs are described by this series.

These are simply examples of attempts that have been made to develop information specifically for the handicapped by commercial companies. These are not all, nor are they necessarily the best, but they are very usable.

One other area of information has to do with the relationship of various kinds of tools to different jobs. While a great many tools are specific to certain kinds of work, many handtools may be useful in a wide variety of jobs. The MIND Company of New York City has developed a series of teaching units in audio-visual format of cassettes and filmstrips which provide instruction for the use of hand-tools. The units teach the use of General Screwdrivers, such as stubby, offset, automatic, and wedge and magnetic screwstarters. It includes both General Wrenches and Sockets, Pliers of all kinds, Pipe Fitting Tools, Hand-Drills, Hammers, Cutting Tools such as metal snips, diagonal pliers, and chisels, Files and Planes, Hand-Saws, Rules, Squares, Levels, Meters and Gauges, Painting Tools and Micro-meters. Since the units are designed to be used in bench carrels, space is a problem, but the program is a fairly complete one. An additional problem becomes one of making the tasks relevant. Not producing a useful product can become tiresome to some of the youngsters.

Both the Education Division of the Singer Company and the Ken Cook Company provide individualized teaching stations where students learn to use specific tools in particular kinds of jobs. They both have audio-visual machines controlled by the students so pictures of

what is to be done are related to verbal descriptions. Since these are individualized programs, the students can proceed at their individual rates by simply stopping, starting, or backing up the machine which gives the audio-visual instruction. The Ken Cook Company program is exclusively a machines program, and it is complex but very complete. The student tears down, inspects, tests, and then assembles each engine in turn. The first engine is a basic two-cycle gasoline engine. Next, the same procedure is followed with a four-cycle engine. Lessons learned from these two exercises are then put to use in a small-engines application exercise that employs a variety of small engines. A motorcycle engine, marine engine, or outboard motor, chain saw, and finally a Wankel engine are tackled. As in the MIND program, students have the opportunity to learn to use basic handtools, but in the Ken Cook program, the tools are used for the express purpose of engine technology.

The Singer program is similar to the Ken Cook one but it differs significantly by proving a much wider range of simulated jobs to be performed. These include such things as basic tools, bench assembly, cooking and baking, cosmetology, data recording, drafting, electrical wiring, engine service, masonry, medical service, office and sales clerk, refrigeration, heating and air-conditioning, plumbing, sample making, sheet metal, and soldering and welding. The opportunity to explore the different kinds of jobs on an individual basis, certainly makes this an attractive program. Furthermore, both boys and girls can find jobs that interest them in the program.

Almost regardless of what we may wish, there are so many different ways people earn a living through work that it is nearly impossible to

acquaint the youngster with all of them. The clustering of related jobs is one way to organize the information, but that takes on some managerial complexities too. The Wyoming group arranged various jobs in a kind of hierarchy from less complicated to quite complex. For example, in agriculture, the arrangement included florist, gardener, and logger at one level. Next were the poultry producer, beef or sheep producer, and dairyman. Then the agricultural technician, farm implement salesman, and farm mechanic. The fourth step includes farmer, nurseryman, and landscape artist. Then the managers of farms, feedlots, and feedmills. These are followed by the conservationists, game wardens, and forest rangers. Ecologists, horticulturists, and county agents are next. They are followed by the ichthologist, ornithologist, and geologist and finally, the veterinarian and entimologist complete the hierarchy. While there may be some logic to this arrangement, any person with even a passing acquaintance with the work of florists would know that this is far from uncomplicated employment. The raising, harvesting, and marketing of flowers requires a considerable knowledge of soils, chemicals, and genetics combined with some of the skills of an artist for attractive corsage, bouquet, and other floral arrangements.

A somewhat clearer arrangement identifies functions such as mechanics, resources, products and supplies, professional, ornamental, and production, and then relates jobs in agriculture to them. Thus the grain buyer, dairy manager, and agri-chemical inspector are related by function, but are not pictured as less important than the agri-engineer or veterinarian. Similar kinds of arrangements of jobs can be related to clusters such as construction, distributive

occupations, electrical, service, graphics, health, hospitality, metal processing, office occupations, and transportation. Or they might be related to interest or subject matter areas such as art, biology, business, chemistry, English, home economics, mathematics, or social studies.

No one arrangement seems best, but it is eminently clear that providing no system for classifying the jobs leads to the youngsters being overwhelmed by bits and pieces of information which they seldom fully understand. You not only need to provide them information about possible jobs, you also must find a way to make the information meaningful to them. The final part of career awareness is the self-understanding of each child. This may be the most difficult of all the aspects because each child must be given the chance to match his talents, interests, abilities, likes and dislikes, values, skills, emotions, and future hopes and dreams to the realistic world of earning enough to provide a satisfactory life style. In the activities associated with discovering information about jobs, the youngsters also have a good chance to find out about some life styles that are related to the jobs. For example, in the Finney Series job description booklets, one section asks, "Is this job for me?" This forces the child to make some comparisons between his perception of what he is like as a person and what he likes to do and the job conditions. To be sure the youngsters can be realistic in this evaluation, it is up to you to have provided them activities which furnish them realistic information about themselves. This is a challenge of no mean proportions and one which must be started early if it is to furnish information sufficiently soon enough to allow the child time for

modifications to be instituted which have a chance of being successful. It is not, however, a one-shot kind of project. Human beings, fortunately, seem to be capable of modifying their behaviors at any age so there is no time limit on self-improvement. However, change becomes increasingly difficult with age so it seems better to start the process as soon as possible.

Dr. Sandra Boland of the Weld County Colorado Career Project has devised a series of activities designed to teach various aspects of career education. One group which is applied to this subject of self-understanding starts with a booklet called "All About Me." The booklet is marked private, personal, and not to be read by anyone else without the express permission of the child. It is clearly explained to the child that it is his property and his alone because it will be all about him. Although the children are expected to write in their books and, therefore, they must achieve some skill in that area, nothing prohibits them from seeking help in writing their entries so the booklets can actually be used by children who have primary grade level academic skills. Furthermore, there is nothing in the nature of the questions which would be inappropriate for children of different age levels. Indeed, there seems to be no reason why a new booklet could not be introduced every year from first grade through high school except for the boredom of writing about the same subject for 12 years or more. On the other hand, some people never seem to tire of talking about that subject so maybe they could stand to write 12 books on it. The booklet is in question or short answer form with some space under each statement for an adequate response. It starts with a personal statement, "My name is _____," which establishes ownership but then

gets into the revealing things like whether or who the child is named for; if the child likes his or her name; if the child is proud of the name, would rather have a different name, and in each case, why. After this kind of soul searching, the booklet then turns to role playing, but with a twist asking the child what he or she would like to be if he were a sound, a book, a color, a movie, a hero, a car, a building, a friend, an animal, a year, a month, a week, a day, a flower, a food, a TV star, a taste, a touch, a smell, a feeling. As if that weren't enough, the children are then asked what they dream about, at school, at night, when doing nothing, when playing, and then to describe what they will be like when they reach various ages. Finally, the youngsters are asked to tell what has made them feel best, and worst, when they felt shy, when mad, sad, nervous, worried, and happy.

To carry this program in self-understanding, Dr. Boland has invented some story characters and appropriate stories to go with them. Mad Mabel, Greasy Gretchen, Walked-on Wanda, Scared Scott, Sad Sam, Nervous Nellie, and B. O. Barney. Each story allows the youngsters to relate to being mad, sad, having a noticeable body odor, or one of the other character traits in discussions about the causes and consequences of these conditions. The most extensive of the stories is one about Eric and the Golden Horn of Happiness. After the horn has been stolen, Eric sets out to find it. At each step in the journey, Eric must choose between alternative courses of action. The story breaks at each decision point and the children are engaged in a discussion of which course of action is the best for Eric. For instance, there are two roads to take to the land of Elazy. One is a

longer road which takes more time but is safe and will assure his eventual arrival. The other is shorter, but more difficult, dangerous and there is a possibility the road has been blocked or eroded away. The short road is faster, but there is a chance he may not be able to get through on that road at all. Any choice made by the children must be defended. The story does not present solutions. It simply picks up again after Eric reaches Elazy so the children must live with whatever choice they make for better or for worse.

A commercially prepared program designed to get at many of the same things explored by the Weld County Career Project is the TAD Program of the American Guidance Service of Circle Pines, Minnesota. TAD is an acronym from the first letters of the title, Toward Affective Development. Designed for children in third through sixth grade, the materials are organized into five sections. The first section, Reaching In and Reaching Out, encourages the youngsters to explore their own potential through sensory awareness, daydreaming, and brainstorming, then to discover the positive feelings associated with friendship and cooperation as they reach out through listening, taking turns, and sharing ideas with others. The next section titled, Your Feelings and Mine, gives students the opportunity to recognize, label, and understand feelings. This is done with posture, gesture, and facial expressions for non-verbal language and learning how word choice and timing influence verbal communication. The other three sections, Working Together, Me: Today and Tomorrow, and Feeling, Thinking, and Doing, are good programs but tend to be more difficult for handicapped youngsters to participate in effectively than are the first two groups of activities.

A more complete program is one developed by the Educational Achievement Corporation of Waco, Texas, called the Valuing Approach to Career Education. The lessons are suitable for grades kindergarten through eight, and it is divided by grade level so not too wide a span of abilities will be included in each section. For example, the kindergarten through two level emphasizes the uniqueness of the individual, the difference between work and play, the interdependency of work roles, and some reasons why people work. As related activities, at the third to fifth grade, the students look at some tools used by specific workers, the relationship of his interests to future work or leisure, risks or dangers in various jobs, and some activities over which he can exert control versus those in which he must depend on others for control.

At a much higher academic level, upper elementary to high school, are 23 books called the Coping with Series published also by the American Guidance Service. For many handicapped youngsters, these books are too difficult to read, but some teachers have had good success reading to the class or a small group and leading discussions. The subjects are timely dealing with fact and fantasies about drugs, alcohol, and smoking, crutches people use to escape pressures, getting along with others, and a group of books dealing with My Life, Crises, Changing Sex Roles, Coping with Cliques, Living with Loneliness, and Coping with Parents.

At a similarly high level, the Singer Company has designed the Career Awareness Laboratory to help students discover their own needs, interests, and abilities as they relate to career choices. Made up of games, puzzles, and problems on electronic tables, the electronic

equipment is easy to operate, but the concepts developed are sometimes difficult for handicapped students to understand. For example, through various activities the Career Awareness Laboratory helps the youngsters to discover how their own personality traits are judged by their peers and how these traits relate to various kinds of work conditions. A person who was impatient with children's movements and noise might have a difficult time as a teacher of kindergarten age children. Likewise, the inability to learn easily would mitigate against a career in which college attendance was required. Very often, the discovery that a person gets low ratings from his peers on personality traits can be quite traumatic. At the same time, it is sometimes difficult to accept that many career options are open to some youngsters while others in the same group have few for which they can qualify. These kinds of activities which call for the revealing of our abilities and weaknesses need to be handled with a considerable amount of tact and compassion.

Summary

If the awareness activities are going to fulfill their functions of leading the children to the development of good attitudes toward themselves and toward work, of providing them with information about job and career possibilities which are open to them, and of letting them engage in activities that will help them learn to understand themselves--who they are, what they like, what they are good at, and what things contribute to their happiness, none of the aspects of career education can be left to chance. They all must be planned into the educational experience. In Wyoming, the career awareness activities were part of the Social Studies curriculum of the elementary

grades and handicapped children participated with non-handicapped children for nearly all of the activities. However, as some of the concepts to be explored became more complex, the special education teachers found it necessary to prepare their youngsters to participate in the regular classroom. Rehearsal of upcoming lessons was a rather usual practice along with reading some of the materials to the youngsters that they could not read themselves. At the higher grade levels, some teachers in some other schools have found materials like the Fearon Job Box and the Finney Series to be rejected by the non-handicapped children. Thus, ability, background, and achievement differences among the youngsters has often dictated whether the youngsters would be penalized or assisted by specific kinds of administrative grouping arrangements.

It should be emphasized that there is nothing inherently good, better, best, or worst about any administrative arrangement. Goodness or badness must be judged in relation to whether children are helped or hurt by the program. Any child who is unable to understand and participate in the ongoing activity of the group ought not be there. Likewise, any child who is faced with activities and materials much too easy or otherwise inappropriate to his abilities is not being provided relevant experiences either. It is obvious that the integration of handicapped children in regular classrooms does little to further their development if they are not actively included in the learning environment. Conversely, a resource room or special classroom which does not try to help them cope with the problems of being handicapped is not an acceptable placement either. Probably there is no arrangement that works equally well for every child in every school.

If this is the case, then it seems even more important that we use the right criterion in the evaluation of our efforts. In the case where we are trying to help children learn about the three main elements of career awareness: work attitudes, job information, and self-understanding, it would seem that we should judge our efforts on the observable growth of the children, not on whether they are taught in a regular or a special classroom.

It seems quite likely that the best place to learn about different aspects of career education will change with the subject matter and the age of the youngster. After all, we go to a gym to learn basketball, a shop for industrial arts, and a stage for theater. Why should we not use the same good judgement in pursuing the different aspects of career education? After all, if the program is going to reduce the discontinuity between the adult work world and the child's world, it would seem to be important to expose the youngsters to as many experiences as possible that will broaden their experiences. An inflexible administrative arrangement does very little to further that goal. This is a difficult though rewarding task and we need all the help we can get including administrators who understand and facilitate our efforts.

CAREER EXPLORATION: AN INTEGRAL PART OF THE CAREER EDUCATION PROGRAM

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Career exploration for the handicapped adolescent is not any different than career exploration for the non-handicapped adolescent when we talk about what career exploration is. There may be, however, some differences for the two groups when we talk about when it happens, how it happens, and where it happens.

This paper will focus on career exploration for the handicapped adolescent -- What is it? How does it occur? How can it be provided? Where does it occur? In addition, the teacher's and/or counselor's responsibilities in providing a career exploration program will also be suggested.

Career Exploration for the Handicapped Adolescent? What Is It?

As suggested earlier, there is nothing unique in the nature of a career exploration program for the handicapped adolescent. We are still talking about the same types of explorations that are appropriate in career education programming for the non-handicapped adolescent. The important point to make here is that career exploration may involve more than what you think it does, just thinking of the term -- "career exploration."

The broader conceptualization of it, which will be presented here, stems from career education's emphasis on a definition of "career" that goes beyond one's occupations, to encompass all of an individual's life experiences. Career education, then, would be referring to education and training aimed toward enabling a person to become skillful with his life. Career exploration would be engaging in the active search for options or alternatives that can be chosen in determining what one's life will be like. This involves exploring options related to one's self, work, leisure, and all those resources that influence one's career development.

Perhaps another way of presenting this broad view of what career exploration is can be more specific. If we see exploration as an active search for options, it makes sense to conceive of it as a series of endless questions.

In the exploration of <u>self</u>, for example, some questions might be:

What am I interested in?

How do I feel about working?

How do I feel about not working?

What are my strengths?

What do I like to do?

What traits do I have that are required for <u>any</u> work -- paid or unpaid?

What are my values about who and what I want to be?

In the exploration of <u>work</u>, some questions might be:

What interests do I have that relate to work possibilities?

What kinds of work have appeal for me? Why?

What preparation do I need for those areas I am most interested in?

What is work on a job really like?

What kinds of work would I do for no pay?

In the exploration of leisure, some questions might be:

How do my interests relate to leisure time activities?

How do the things I like to do relate to leisure time activities?

What are some leisure time activities available to me?

In the exploration of resources, some questions might be:

Where can I find out what might be available in occupations?

Where can I find out what is required for certain kinds of work?

Where can I find out what I can do?

Where can I try out some of the things I can do?

Where can I find out what it feels like to work?

Where can I test out some ideas about who and what I want to be?

Career Exploration for the Handicapped Adolescent: When Does It Happen?

Career exploration happens whenever questions are asked about one's future, whenever there is an active seeking of options, and whenever tentative decisions are tested or "tried on for size." It is a natural follow-up to career awareness that a person has about self, work, leisure, and resources.

Typical conceptualizations of a school-based career education program suggest models that appear to have discrete, independent phases in the program. Career awareness is suggested for kindergarten through sixth grade, career exploration for grades 7 to 10, and career preparation from grades 10 or 11 through adult and continuing education.

My perception is that this is misleading. Career awareness never really stops: Career exploration begins with awareness and lasts as long as any new awareness becomes interesting or important enough to pursue or try out. Career preparation leads a person to believe that that interest or activity is of value and the development of skills for doing it is desirable or needed.

Career exploration occurs throughout life, then, but may become the primary emphasis in school after a solid base of awareness and orientation has taken place. For handicapped adolescents, it would be ideal to hope that it could come in school at about the same time as for non-handicapped. My feeling is that it should be begun as much as possible on an individual basis when a student is sufficiently aware of his own interests, skills, and values and continue until explorations have really provided the best options, and not just one acceptable option. On the average, this process will take longer than for the non-handicapped and may extend from grades 7 or 8 to grades11 or 12 before preparation is begun. In some cases, exploration may still be needed after completion of school, and vocational rehabilitation personnel should consider that in their plans for extended evaluation programs.

Career Exploration for the Handicapped Adolescent: How Does It Happen?

There is no doubt that career exploration, like career awareness, occurs very early in a person's life. These experiences are informal and incidental to other purposes, for the most part, but they are career explorations. I am talking about the early role playing by children, when they say they are going to be a nurse, or teacher, or

astronaut and then test out the "fit" of that decision by doing things they believe are appropriate for those roles to see if they like doing them, as well as to see how people respond to them when they are in those roles.

Career exploration for handicapped adolescents will continue to have some of this personal exploration at an incidental and fantasy level, but the school needs to bring it to a more rational, purposeful level by providing some structure. This structure at school can come from formal or informal experiences which are deliberately planned for all students. Let's talk about some of these experiences.

Formal Exploration Experiences

At the junior high school level, career exploration can occur formally through a course of study. For the first time, students are provided some options as to what they will study in school. Typically the new options are extensions of previously introduced skill areas, but offer more depth and concentration. Courses of study ordinarily include new alternatives such as practical and/or industrial arts, dramatic arts, chorus, band, mechanical drawing, art, typing, and general business. Students can explore their interests, abilities, and values in these areas while they are also being introduced to some work, leisure, and resource possibilities.

At the high school level, course of study alternatives increase and provide even more specialization for exploration. More narrowly defined areas such as woodworking, auto shop, clothing, foods, orchestra, shorthand, cooperative work education, bookkeeping, and many more are available. Even in the traditional academic areas, some students can explore in more depth through alternatives that

become more specific -- history of the American West, science fiction, calculus, psychology, politics, creative writing, journalism, and similar subject areas. All of these are designed for more specific exploration, as well as initial skill training.

In addition to the typical courses of study offering exploratory options, there are several schools across the country offering innovative approaches to the enhancement of career exploration. Many of these are through Title III, of the Elementary and Secondary Education Act. In the Atchison (Kansas) Public Schools, for example, Project PACE (Personal Adjustment and Career Exploration), a new program focusing on personal adjustment and career exploration, is being developed for junior high school educationally handicapped adolescents. It provides for a three phase sequence:

1. Self Development (Grade 6) is offered as a course, one hour per day, two days per week. Self-awareness, interpersonal relations, and work attitudes and values are the areas of emphasis and are approached through a group process procedure based on Transactional Analysis.
2. Occupational Exploration (Grade 7) is a course offered for seventh grade students one hour daily. The major objectives of this phase focus on awareness of occupational alternatives and job requirements.
3. Work Experience Laboratory (Grades 8-9) is the third phase course offering and involves students two hours per day, five days per week. The major objectives of this course include exploration of occupational roles and requirements and employability trait development. The "hands-on"

approach to work is based on the Junior Achievement model to the extent that students choose real work tasks that match their interests, and work in small groups on projects involving the development of a product, completing one or more steps of an industrial product development sequence for a business or industry, or providing a service. This program has opened up a completely new set of exploration experiences for the students in that school.

Another example at the high school level in innovative approaches to course of study alternatives is a unique program in Quincy, Illinois. This is basically a school-within-a-school concept which provides students a choice among seven major course of study options.

The seven schools are as follows:

1. Traditional School - a curriculum designed for those who want a traditional program and who desire or need direction, guidance, and supervision in it.
2. Fine Arts School - a program using an arts-oriented curriculum, offering more than 50 courses in all areas of the visual arts, music, drama, radio, t.v., broadcasting, and modern dance.
3. Flexible School - a curriculum designed for students desiring a relatively structured program, yet wish to have some alternatives available.
4. P.I.E. School (P.I.E. - Project to Individualize Education) - a curriculum permitting students to enroll in courses related to interests and career goals, but which is student-directed through self-scheduling in

lectures, independent study contracts, or out-of-school activities.

5. Career School - a school focusing on the acquisition of occupational skills and behaviors through school and work experiences.
6. Work-Study School - a curriculum designed to meet the needs of students who need guidance and direction in maintaining an interest and successful performance in school. Out-of-school jobs, counseling, and individualized curricula are used in this course of study.
7. Special Education School - a program designed to meet the needs of students requiring special instruction or services in academic, vocational, social, emotional, and physical development. Pre-vocational instruction, practical vocational training, and on-the-job work experiences are the primary elements of this school.

Handicapped, as well as non-handicapped students, can choose among these alternatives in the Quincy program.

A second formal approach to providing career exploration at school is through the coursework in each student's course of study. This provides even more specific exploration for students as they pursue a given interest area in a course. Typically this includes specific units of instruction within courses. For example, in the Lawrence (Kansas) schools an industrial arts course at the junior high school level has a unit on the world of construction, and the students actually plan and design structures, beginning with choice of materials, then to plumbing installation, electrical wiring, roofing, plastering,

painting, and floor covering. The end product is a scale model unit that has all the major components of a real house. Another example of exploration within a course would be in art courses which may have units on printing, oils, jewelry making, clay sculpture, photography, drawing, etc. A cooperative work education course may provide for a sequence of work experiences at school or in the community to provide exposure or exploration to a variety of work environments. Cooperative work-study programs between state vocational rehabilitation agencies and local school districts are one example of these kinds of programs. In all cases, exploration is systematically presented within the organization of a given course curriculum.

A third formal approach is through the school's guidance program. The guidance program offers testing, occupational information, and counseling. Handicapped adolescents can seek answers to some of their questions through the school guidance counselors and/or through special pre-vocational or vocational counselors. Let's look at some examples of these three exploration areas in a guidance program.

Testing. A variety of career exploration instruments are available. Not all are completely appropriate as designed because of reading and/or response deficits of the handicapped. Some which have potential utility for individual exploration and guidance of handicapped adolescents are:

1. The Vocational Interest and Sophistication Assessment (Parnicky, Kahn, and Burdette, 1968) - an interest inventory designed for non-readers and those with limited intellectual performance.

2. The Reading Free Vocational Interest Inventory (Becker & Ferguson, 1969) - another interest inventory for non-readers recently developed.
3. The Devereux Adolescent Behavior Rating Scale (Spivak, Haines, & Spotts, 1967) - a behavior rating scale which assesses personality development through behavior.
4. The Social and Pre-Vocational Information Battery (Rehabilitation Research and Training Center, 1974) - a general domain referenced test, sampling knowledge in the domains of employability, economic self-sufficiency, family living, personal habits, and communication.
5. The Minnesota Importance Questionnaire, Form S (Minnesota Studies in Vocational Rehabilitation, 1969) - a general adjustment instrument designed to reflect work adjustment attitudes regarding a worker's needs on a job.
6. Selected subtests from the Texas Screening Battery for Subnormals (Peck, Stephens, & Fooshee, 1964) - a battery of assessment instruments especially designed for the mentally retarded in the areas of employability, personal and social adjustment, and job readiness.
7. Work sample techniques comprise another area of exploration for guidance purposes. The three major standardized work sample procedures include:
   a. The TOWER Work Sample System (Institute for the Crippled and Disabled, 1967).
   b. The Philadelphia Jewish Employment and Vocational Work Sample Battery (The JEVS Work Sample Battery).

c. The Singer Vocational Evaluation System (sometimes called the Singer/Graflex System).

These and other tests and/or assessment systems may provide opportunities for exploration in the initial steges of career development by raising possibilities and suggesting information about a student that were previously unknown to the student, school personnel, or the student's family.

Occupational Information. There are scores of career exploration materials available now that provide occupational information. Most of these are print materials, but many are multi-media kits which add auditory and visual reinforcement to the information, and, as such, are usually more appropriate for the handicapped.

Handicapped adolescents, particularly those with reading problems, will not use print materials to any extent and will typically choose any system which does not require reading over one that does.

Three examples of current career information systems of this type are the Singer Occupational Kit, the 3M Talking Page System, and the Ken Cook System.

There is no doubt that direct, "hands-on" exploratory experiences are the best. One of the best career exploration systems that is currently available and fits this category is Project Discovery. Project Discovery is being developed by the Southwest Iowa Learning Resources Center in Red Oak, Iowa. A set of 20 exploration packages is now being made available through Phi Delta Kappa, but other new occupational areas are being developed.

The entire series of career exploration packages is designed for junior high aged students, but it would be appropriate for handicapped

adolescents through high school. The packages are designed to separate work activities into areas dealing with people, data, or things. Through direct involvement in each of the occupational areas selected, a student can determine the function or interaction preferred or if certain products or activities are more satisfying than others. To get around some problems in using the packages, non-readers, or low-level readers can be provided audio tapes of all instructions.

Project Discovery should be seen to really get a feel for how it works. We, like the students, usually respond to a more direct information system. Project Discovery's film, "I'd rather be. . ." gives that kind of information.

Counseling. Counseling, the heart of any guidance program, is, of course, the most personalized exploration system there is. Handicapped adolescents respond to frequent and direct feedback and need a counseling approach that responds to their questions, uncertainties, difficulties in decision-making, and communication levels. In this, there is no substitute for one-to-one contact between a student and an interested adult, but group counseling can be effective.

In summary, we have formal career exploration experiences provided in school through courses of study, course curricula, and school guidance programs, with the guidance programs offering testing, occupational information, and counseling services. How else can career exploration occur?

Informal Exploration Experiences

Informally, handicapped adolescents have opportunities for more exploration. Some of these informal opportunities border on formality

because they take place in organized groups. Typically, these are interest or activity groups whose primary purpose is enjoyment in leisure. I am speaking of extracurricular activities in school or community activities that can be excellent exploration experiences. These include sports, special interest clubs, music and drama, Future Farmers and Future Homemakers, Explorer Scouts, 4-H, Civil Air Patrol, Junior Achievement, religious youth groups, city parks and recreation programs, and many others. Informal experiences that may be outside of the influence of the school or community organizations are those which occur as a result of family activities or those which are self-initiated. Family life or activities may include the encouragement of self-evaluation, sharing in home management and maintenance chores, participating in decision-making, outings or vacation trips, and extensive use of community resources. Self-initiated exploration activities may include such things as hobbies, reading, conversation, or part-time jobs.

Take a few seconds now, and evaluate your own career exploration history. Have you learned more about yourself through formal or informal exploration experiences? Have you learned more about occupational alternatives and some of the realities of the world of work through formal explorations or informal explorations? What about leisure -- what it can mean and how you can use time for it -- did you learn most through formal or informal experiences? How did you learn about resources important to your career development -- formally or informally?

The point I am trying to make is that we may find formal exploration experiences more critical in leading a person to decisions

in one area of exploration, and informal exploration experiences being more important in another. The implications of this for handicapped adolescents center around the notion that the school should provide both formal and informal exploration opportunities in a purposeful way, because handicapped teenagers have not typically taken advantage of school or community options, nor shown much individual initiative in their career development. We in education have to assume a great deal of responsibility in planning how career exploration can happen for our handicapped students. In doing that, we assume some responsibility as to where it will happen also.

Career Exploration for the Handicapped Adolescent: Where Does It Happen?

Where does career exploration happen? From what has been said so far, it obviously can happen in schools, in the community, and at home. More specifically, it can happen in English composition, social studies, art, science, gym, or the counselor's office. It can happen in the courthouse, a barber or hairdresser's shop, a hospital, a laundry, or a church. It can happen at home in the kitchen, the garage, the yard. But does it?

The handicapped adolescent may not realize any career exploration benefits from just being in these locations. This fact relates directly to the current issue of student placement for the handicapped in the mainstream of education. Will placement in a special class encourage or inhibit career exploration? Will placement in a resource room and regular classes promote career exploration or obstruct it? The answers to these questions cannot be provided through administrative decisions regarding the location of a student's educational program. It all boils

down to who is in contact with the student and what happens, not where.

As in any exploration, someone must be responsible. Someone must assume leadership. Someone must be the guide. Personally, I have real concerns about the current readiness of many regular secondary teachers to assume responsibility for the career exploration needs of their non-handicapped students, much less the needs of handicapped students. So far, the results of research on mainstreaming of elementary level handicapped children has shown that the most frequent problems mentioned relate to the questions of who has final responsibility and accountability. My guess is that this will be even more the case at the secondary level. I concur with Dr. Oliver Kolstoe's position that mainstreaming should relate to the domain of performance you are concerned about. In career exploration for the handicapped, we have to ask for each student, "What do we want him/her to explore?" "Where can it occur most effectively?" "Who is going to do it?"

Teacher/Counselor Responsibilities in Career Exploration for the Handicapped Adolescent

Regardless of where career exploration opportunities and experiences are planned in a handicapped student's instructional program, those teachers and counselors who contribute must have or develop some specific competencies.

The first of these is to have or develop an understanding of career exploration. A teacher or counselor working with the handicapped must view career exploration in its broadest sense and understand its importance in career development to be able to work effectively with them.

Second, any one working with an adolescent who is handicapped should have or develop human relations skills that can bring handicapped adolescents into the self-awareness and career exploration process. Career exploration is a personal process and any assistance to a person in that process will necessarily involve human relations skills.

A third competency for persons responsible for career exploration for handicapped adolescents is that of developing curricula that includes the self-analysis or self-evaluation process in career exploration. If this process is included, it provides a common element that the students can build on or generalize to in other experiences.

Fourth, there should be skill in designing group or individualized learning activities that infuse or integrate career exploration concepts into appropriate curriculum areas or appropriate points in the guidance process. It is not enough to have the "big picture" of how career exploration should fit into a program. The daily contact of teacher and students demands more detail in planning than one usually does in regular curriculum development. Incidental exploration is not enough.

A fifth competency expected of the teacher or counselor is the ability to use a variety of techniques which are appropriate for career exploration experiences. I am talking here about the use of "hands-on" procedures, simulation, role playing, gaming, field trips, problem-solving, or audio-visual materials that will stimulate or maintain interest in career exploration.

Finally, any educator with responsibility for a part or all of handicapped adolescents' career exploration processes should have or develop competence in determining each student's status and progress in the areas of self-awareness, and knowledge of work, leisure, and career development. This suggested competency is based on the

assumption that if we have no idea of a student's level in career exploration we won't know where to begin or end a program. Information from status and progress assessments is critical to decision-making for all the competencies we have just been discussing for those responsible for career exploration with the handicapped adolescent.

Summary

If we have answered the initial questions posed at the beginning of this presentation, you now have a perspective for how at least one person views career exploration for the handicapped adolescent -- what it is, when it occurs, how it can happen, where it can happen, and who or what kind of persons can help to make it happen. It is an area of real importance if we value individual decision-making regarding one's career. If we are satisfied with a system that sees handicapped individuals like so many corks on a swift river, with no power to control their speed or direction and who should be grateful anytime anyone plucks them out, regardless of where they are tossed or disposed of, then career exploration is a waste of time and effort.

I don't see competent educators and rehabilitation personnel being satisfied with that kind of system. I see them wanting to help people help themselves and provide them with the [illegible]ht of choices in their own personal development, in work, and in leisure. [illegible]is information will add something to that effort.

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PREPARING THE HANDICAPPED FOR GAINFUL EMPLOYMENT

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In order that we may better understand and discuss typical and atypical programming for preparation of the handicapped for gainful employment, it would appear that we must address our attention to two basic, related considerations: (a) the educational philosophies we embrace and the theoretical premises from which they are derived, and (b) the practices we employ in serving our avowed philosophies and the validity they possess in attaining for our students the positive academic, social, and vocational results we desire.

We must take a critical and unbiased look at what we are doing and the justification for our procedures. We must consider if our often poor rate of success is related to improper methods, inadequate assistance and cooperation from our fellows in general education, poor craftsmanship on our own parts, or an inappropriate base from which we have come. We must examine the types of programming that exist, the theoretical backgrounds for such programming, and whether or not they are valid. We must determine which methods are successful or unsuccessful and why they are so, with a realization that such considerations may lead to alteration or even abandonment of certain concepts and procedures we presently hold to be unquestionably valid.

Therefore, this paper will be divided into three main considerations: First, an examination of what typically exists in special education programming for the handicapped at the secondary school level and the rationale from which it has evolved; second, a discussion of a philosophy of education for the handicapped that is atypical and a description of a program that encompasses this philosophy; and finally, an examination of the components within successful programs that seem essential to provide the impaired with skills leading to gainful employment and social competency, and how these components can be incorporated into local programs.

Typical Educational Programming for Secondary-Aged Handicapped Students

What typically exists in special education programs at the secondary school level? To varying degrees, all programming seems to incorporate most of the following: A location within a regular high school, a teacher with special training, students with varying cognitive capacities and/or emotional disabilities, separation of special education students for a portion or all of the school day from their normal and gifted peers, with an attempt to infuse them into regular classes if some degree of success is anticipated, an attempt to emulate the class offerings available to normals, an attempt to cause social interaction with normals, inclusion in vocational training in skill centers or sheltered workshops if available, an attempt to obtain part-time employment at as early an age as is possible (either in or out of school), and job tryout, on-the-job training, and/or permanent job placement in the community.

Let us examine this type of programming and the rationale for its development and wide acceptance.

Our examination must by necessity begin by defining the population about which we are concerned. While this may seem elementary, it is absolutely essential, for the definition we accept will totally determine the type of programming we employ. In all definitions of the mentally impaired, the primary ingredient appears to be that the individual be unable to profit from the regular curriculum because of mental deficit. Most definitions rely primarily on an examination of the cognitive domain, although the affective and psychomotor domains are given consideration. That is, an individual must have indications of mental deficit as demonstrated by a developmental rate approximately two to three standard deviations below the mean on an individual, standardized psychological instrument administered by a qualified psychological examiner. He must also demonstrate unsatisfactory academic progress not found to be based on his social, economic, or cultural background. His disability must extend to his social as well as to his academic functioning. In general, we are describing an individual who has innate abilities approximating one-half to three-quarters of normal potential, who has an inability to function in the academic program of the normal high school, and whose inabilities are manifested in all aspects of his life.

Having accepted such a definition, what type of program has typically been initiated to assist the mentally impaired in becoming socially and vocationally competent citizens? Usually, the student has been removed from the general curriculum by placement in the special education class, but has he been placed in an educational structure in

which he can survive? Is he still constantly exposed to the pressures of the regular school? Does he still have to compete with normal and gifted peers in social situations? Is he aware that he is a "second class" citizen, that he was separated because of his inadequacies? Is he able to compete on the interscholastic sports teams, be a member of the student council, or be a cheerleader? Is he teased and ridiculed and talked about behind his back in the lunch room and study hall? Is he found to be incompetent to deal with the regular classes in which he may be tried?

The impaired student has been provided with a curriculum apart from the regular one. But is it not really geared toward the same achievement in the same academic areas as that offered to his normal peers? Is he taught the skills he will find necessary to live in the world, or a facsimile of those skills offered normals? Is an attempt made to place him back into the mainstream of the educational system, hoping that he will profit from experiences with normals? Does he profit, or does he encounter frustration and develop increased feelings of inadequacy? It seems that many of the conditions under which the mentally impaired cannot succeed still prevail.

There appears to be two reasons for the widespread incidence of the typical high school special education program - one philosophical and one practical. The philosophical reason revolves around our reluctance to accept the fact that what is offered in general education is not a "good" in and of itself, something for which to strive, something to be achieved if at all possible, and, if not possible, something to attempt to at least marginally achieve. In other words, the goals of the typical comprehensive high school have become the goals for programs for the handicapped. Too often it appears that we give only lip service to our

commitment to providing a special curriculum - that in reality our attempt is to get our students to be more normal, because being normal is an unquestioned "good." While we may boldly state that we must provide a special curriculum for our students, I fear we in fact feel that our major purpose is to make our students more normal, and that the most appropriate method for accomplishing this is to provide them with normalization procedures, i.e., the regular program with regular students.

Much of our difficulty in wrestling with the normalization principle appears to have come from a misconception of another principle - that "all men are created equal." In the schools, "equal" has too often come to be interpreted as "same as" - that is, providing the same educational opportunities to all, or striving to structure a situation so that all may reach the same goals, rather than providing equal opportunity for each to learn at his own rate, to his own limit of ability, and toward his own attainable goals. I would submit that the goals considered adequate for the normal are not only unattainable for the handicapped, but would be inappropriate if marginally attainable. The vocational aims of the comprehensive high school are preparation of its students for entrance into college or the skilled trades, whereas the mentally impaired will probably not continue in any post-high school training and will normally find vocational goals fulfilled in the unskilled or semi-skilled areas of employment.

This accounts in great measure for our traditional and continuing effort to integrate or mainstream our students. It is somehow assumed that being involved with normals will make our students more normal. And yet, the fact is that the mentally impaired have been referred for

special education precisely because they could not profit from normalization. The definition of the disability belies the assumption. John M. Throne, in a discussion of the normalization principle, states, "To speak of normalizing the retarded by treating them normally is a contradiction in terms: treating them normally will leave them functioning as retarded. Retarded by definition means retarded under ordinary conditions. Only extraordinary conditions - not-normal - can result in diminishing retarded states, i.e., making the retarded more normal."

Oliver P. Kolstoe, in the first presentation in this series, stated, "There is nothing more unequal than providing equal opportunities to people of unequal abilities." He indicates that placement of students into regular programs produces an inferior product in terms of vocational success, stating, "I have never found a single shred of evidence which suggests that regular class placement results in a better or more successful worker than those from the special class. On the contrary, everything suggests the product from the regular class is inferior." The regular curriculum is geared toward producing academic achievement and not the acquisition of job related skills. Kolstoe continues:

> "The emphasis on mainstreaming the mentally retarded in regular programs effectively changes the curricular focus from one of developing skills of independent living and vocational efficiency to demonstrating academic achievement. Thus the outcomes of the educational efforts become vaguely identified with success in classes in the sciences, English, math, history, and the like, rather than being related to the ability to get and hold a job and maintaining oneself as an independent, responsible adult in society."

A program that does not emphasize training for attainable employment is a program without meaning for the mentally impaired. According to Simon Olshansky. of Community Workshops in Boston, work for mentally impaired adults is more than a means of earning a living. Work is their way of proving to themselves they are capable of functioning as independent, self-respecting adults. Without work, their disabilities loom so large in their own eyes that they see themselves not as total people but as "the handicapped." As Olshansky puts it, "Their disabilities become their identities." The regular program of preparation in the academic aspects of life is one that is probably adequate for the gifted, questionable at best for the individual of normal abilities, and totally inadequate for the mentally impaired.

With recent litigation challenging placement procedures, there has come a national cry for mainstreaming or placing students in the least restrictive environment. Kolstoe, paraphrasing John Kidd, has suggested that mainstreaming may be desirable depending upon the domain of the disability. If the disability is affective or psychomotor, then perhaps mainstreaming is desirable if and when the behavior disorder is alleviated or physical restoration accomplished, but that if the problem is cognitive, mainstreaming may be the goal for "post school behavior with a separate stream of educational experience the logical requisite process for the post school mainstream product." I submit that mainstreaming, if by this we mean placing students who do not possess the ability to succeed into regular classes, is <u>most</u> restrictive, <u>least</u> productive, more likely to produce emotional conflict, and uses the wrong criterion to judge success.

The second, or practical, reason for the widespread advocacy of the typical special education programs utilizing mainstreaming is that the programs have been structured to serve the populations enrolled in such programs. Traditionally, the majority of students in programs for the mentally impaired have not met our definition of the disability. Estimates of the number of students in such programs, who are not truly representative of the group, run as high as 80%. Most programs professing to serve the educable have in fact been primarily serving the economically, socially, culturally and educationally disadvantaged, and the emotionally impaired. This is apparent from the number of legal suits that have been in the news indicating the unconscionably large number of minority students in programs of special education, and the attempt to mainstream such students back into regular education.

In visiting special education programs around the State of Michigan, it has become apparent that many students in such programs are not educable, most are not integrated into regular classes, those who are mainstreamed fall into a disability category other than educable mentally impaired, and that even for these non-educable students success is extremely rare because these individuals function in many ways similarly to the educable.

In attending conferences in special education, it appears that the philosophy of mainstreaming is rarely challenged, only the methods of making the philosophy viable. Most conferences center their concerns around such considerations as how to better integrate handicapped students into regular classes, how to get them to act in a more normal manner, and how to convince the regular teacher that he should accept them, rather than considering the basic question of whether or not this is a reasonable

and productive course to be pursuing. How often do such conferences question whether or not this is a valid enterprise? It seems that we view our task as one of finding the magic formula for removing our students from special education, rather than seeing it as one of providing a quality education in an environment conducive to its acceptance.

Another of the bases for placement of special education students into regular classes and attempting to normalize them is that in doing so we will assist them in developing stability in personality. That is, in order to learn to deal with normals, one must associate with them and learn to get along with them; and, therefore, we must provide an opportunity for them to do so. There are several flaws in this approach. One is that it is assumed that an individual cannot learn to function in society if he is removed from the predominate group for instructional purposes. This line of reasoning would mean that all those in society who are removed would suffer similar consequences. Therefore, those who attend college for four years or more, those who attend trade schools, or those who are isolated in any sense from the general population for the school day would find it difficult, if not impossible, to return to the everyday world and survive. Another flaw in this assumption is that it implies that isolation for a six hour school day means isolation that is total, and that the individual has no contacts with the normal and gifted in the home and the community. The greatest flaw, however, is that such an approach does not build stability in personality, but, quite the contrary, builds instability and feelings of inadequacy and neglible self-worth. Those involved in special education are well aware of the hopelessness of most mentally impaired upon entering special education if they have first been exposed

to the constant frustration of trying to compete in the regular program. If it is possible to generalize about the personality components of the mentally impaired, the description would undoubtedly be one of lack of confidence, loss of feelings of self-worth, impassivity toward the world in general, and/or a striking back at a world that appears hostile and impossible in which to compete.

In many states, legislation has recently been enacted that makes special education services mandatory. While this is a joy for those of us who have been decrying the injustices perpetrated upon the impaired, it also is a matter of some concern. For most such legislation requires not only that special education services be offered, but goes further to specify course content to be offered, primarily with regard to pre-vocational and vocational education. This should not be considered as a negative development, but it has come to be one because it requires either that the special education program itself provide vocational training or that the special education student be included in the vocational training programs offered regular students. Therefore, most programs have attempted to infuse the impaired into vocational education programs with normals in much the same manner in which they have attempted to infuse them into academic programs, and with similar results.

The problems with mainstreaming handicapped students into vocational education programs are numerous. Vocational education assumes that the student who completes the course will enter the job market in the skilled areas. It also assumes that the student has normal academic skills and can comprehend materials and methods of instruction commensurate with his chronological age. It further assumes that entry into unskilled or semi-skilled areas of employment require no formal

training, and that the skill itself will be sufficient to produce a competent, satisfied employee.

None of these assumptions is valid for the mentally impaired. The handicapped will nearly always enter the unskilled or semi-skilled employment areas, and will require training for these occupations. They will not be able to compete in regular vocational classes because of the complexities inherent in them, the judgements required, and the academic background needed. Perhaps most importantly of all, the mentally impaired will need training in the work habits and social skills that cause most failures in employment - skills that we assume normals obtain incidentally. They need training for the general world of work as well as specific skill training. In cases too numerous to mention in my own state, the mentally impaired are relegated to only two areas in skill centers - custodial training and low level food service training.

If skill training in skill centers has not been very appropriate, neither has part-time employment always been effective. This is so for several reasons. One, most placement is attempted at a mental age far below what would be expected of the normal population. In most cases, well-meaning teachers have attempted to find part-time employment for the impaired, in or out of school, as soon after entrance into high school as possible. This means that the students are approximately fifteen or sixteen years of age chronologically, and therefore at best only ten or twelve in terms of mental age - an age at which we would not consider a normal youngster to be mature enough to handle the requirements of employment. Secondly, most placements of this nature are either without pay, at reduced pay, do not require that the student employee meet the same standards as regular employees, or are for a

short period of time such as those in which job stations of a few weeks duration per station are used. None of this is totally satisfactory in providing the student with the knowledge that he is capable of holding a real job.

However, work-study programs have been effective in those areas in which care had been taken to match the student to the job, in which vocational training has been a prerequisite, and in which consideration has been given to the maturity of the student. Albert Van Dyke, in New York State, has followed up on 34 former students of special education classes, one-half of whom had been engaged in work-study programs and one-half of whom had not. Of those with work-study backgrounds, 65% were employed. Of those without it, only 35% were employed.

An Atypical Program for Secondary-Aged Handicapped Students

If the typical special education programming is found to be faulty in its philosophical premises and inadequate in its stated function of producing socially and vocationally competent adults, what other options are there? Is there an option that can provide the mentally impaired with the vocational skills needed to obtain and maintain competitive employment, the social skills necessary to become independent, happy citizens, the strengths in personality that will foster self-confidence and feelings of self-worth, and do so in a setting that is not only non-threatening but comfortable and pleasurable and provides the variety of social experiences that make the high school years some of the best in an individual's life?

We have agreed that the impaired by definition cannot survive or prosper in the regular setting, so the foremost aim of this option must

be to remove the student from the mainstream and provide him with an educational and social environment in which he can compete, in which he is emotionally secure, and yet at the same time not rob him of the opportunities afforded the normal student in the regular program.

The program of Kent Occupational High School in Grand Rapids, Michigan is an example of such a program. This program, in operation since 1961, has a record of success far superior to that of any other program with which I am acquainted. There is no component of this program that has not been attempted in various forms in other programs. The innovation in the program is that it combines the portions of school, sheltered workshop, and vocational training that have proven to be effective, and does so in a specialized setting. Other programs utilizing similar techniques, but in slightly different settings, are those in Muskegon, Michigan and the Special Education-Vocational Rehabilitation program in Detroit.

Kent Occupational High School is a complete high school designed specifically for the mentally impaired. It serves students on a county-wide basis, providing services for 20 constituent local school districts. All students, between the ages of 15½ and 26 who are residents of the County (or Intermediate) school district, and are recommended for placement by a local educational planning and placement committee are eligible. Placement requires that the student meet the criteria set by the mandatory special education laws of the State of Michigan, which basically are the requirements found in the previously mentioned definition of the educable mentally impaired. The local school district is the sole determinor of placement, and therefore, the school accepts all students referred.

The student population is both urban and rural, since it is drawn from both the City of Grand Rapids with a population of approximately 250,000, and an area of medium and small cities, villages, and townships also with a combined population of approximately 250,000. The majority of students enrolled would fall within the lower and middle socio-economic classes, since a good portion of the upper socio-economic class tend to attempt to resolve their students' educational difficulties through placement in private schools. Even though special education for the mentally impaired has existed in Grand Rapids since 1931 and in the remainder of the County since 1957, the majority of students still are enrolled in special education for the first time at the junior high school level. This is, of course, a consequence of the philosophy mentioned earlier, in that the parents are reluctant to admit the disability and the educational community is reluctant to admit that the regular program in general education cannot resolve the problems inherent in the disability. Therefore, while some students entering the high school program have been involved in special education since the early elementary years, the majority have experienced the frustration and failure of the regular class, with resultant feelings of inadequacy, lack of self-worth, and quite often inappropriate or bizarre social behavior and emotional disabilities.

The program is currently located in a suburban setting on the same site as one of the two county-wide skill centers in a facility constructed in 1975. Prior to 1975, it was located in an unused regular school building constructed in 1929. The present building contains six pods, with provision for small and large skills training, classrooms, physical education, and socialization training

through the use of a commons, snack bar, and student lounge and game room. Much care was taken in planning this facility to ensure that it would be warm and comfortable and would give the students a sense of stature and belonging.

The program for the typical student encompasses 3½ years, with entrance at age 15½ and graduation at age 19. The student remains in Kent Occupational, however, until age 26 if additional time for maturation or for gaining skills is necessary. The program of instruction is divided into two broad categories, with approximately one-half of each day devoted to classroom offerings and the other half day to skills training.

Classroom Offerings

The classroom area is similar to that of other small high schools in many ways. It operates on a six hour day, with students moving from class to class and from instructor to instructor. It offers opportunities to participate in interscholastic sports of a wide variety for both male and female students, ranging from group sports such as football, basketball, and volleyball to individual sports such as bowling and tennis. The student may be involved in student council, school vocal and instrumental groups, or in cheerleading. The typical amenities of class rings, yearbooks, and the like are offered.

However, the classroom area is different from the regular high school in more ways than it is similar. Obviously, since the student body is composed of individuals with mental deficits, the offerings are presented at a level and at a rate of movement commensurate with the individual student's academic abilities, and utilizes more involvement

of all sensory modes than the typical classroom. The classroom offerings are also designed specifically to prepare the student in those skills which will be needed for social and vocational survival in the after-school world. The level of presentation and the class offerings themselves are constantly re-evaluated and altered depending upon the needs of the students.

At present, the classroom offerings include: (a) three courses in Home and Family Living, ranging from a basic examination of the individual - his needs, his behaviors, and the reasons for the behaviors of others - to dating, courtship, marriage, and sex education; (b) three courses in Employment, ranging from another basic examination of the student's strengths and weaknesses in relation this time to employment, his desires and possibilities, to coverage of job availability, job requirements, application blanks, interviews, and on-the-job field trips; (c) two courses in Government, covering basically the demands of society upon the individual and the services that society will provide for the individual; (d) Consumer Education, covering all manner of purchasing, financing, banking, and other money matters not related to employment; (e) Driver Education, in which the student is offered twice the classroom and on-the-road experience as is offered in the typical program; (f) one class per day each semester in Physical Education, including group and individual sports and swimming instruction, the purpose being to provide leisure time activities for the student throughout life in addition to improving physical skills; (g) one class each in a semi-automated remedial Reading and remedial Math, the purpose of which is to improve basic academic skills; and (h) a final two hour class entitled Pre-On-The-Job Training, in which an attempt is made to

draw together all skills just prior to job placement. In addition, courses are offered in Grooming, Arts and Crafts, and Music, and other areas as the need arises.

The services of five full-time specialists are also available, including two social workers, a psychologist, a speech pathologist, a counselor from the Vocational Rehabilitation Service, and a school nurse. Approximately one-half of the students are involved in individual or group therapy with the social workers, one-half are receiving speech therapy, and nearly all are receiving physical restoration or other services from the Vocational Rehabilitation counselor.

Skill Training

The other half of each day, the student is involved in the skill training areas. The title of this portion of the program is perhaps a misnomer, in that it implies specific skill training such as that found in skill centers or trade or vocational schools. These training facilities usually require that an individual make a judgement as to a course of training involving one or two years time, enter with no skills and leave with those that will qualify or certify him in a definable specific trade or occupation.

In the skill training areas of Kent Occupational, the student is exposed to a maximum of 10 different skill areas for a minimum of nine weeks each. The purpose is to provide a setting (a) in which the student and staff may evaluate the student's abilities in the types of skills required, (b) for the student to test his like or dislike for the type of work, (c) for him to gain some specific skills involved in this type of employment, (d) for him to gain more general work skills that will generalize to many aspects of employment, and (e) for him to learn and

practice the work habits and social skills that will be needed in any type of employment.

It has been shown in numerous studies including those at the Employment Evaluation and Training Project at Southern Illinois University, that such work habits and social skills, considered to be obtained incidentally by the normal student, are necessary attributes of employed persons. These include ability to get along with the employer and other employees, to be on time, to be careful with materials and property, to be properly groomed to the job specifications, and to be able to separate one's personal, home, and family problems from his employment. Much effort is expended in an attempt to inculcate these skills into the work personality of the students.

The main premise behind the offering of a variety of job training experiences is that the mentally impaired will need the skills necessary for entry level into the unskilled and semi-skilled areas of employment, will not have the mental potential to learn the skills necessary to compete in true skilled professions, and will need a variety of experiences in order that they may expand their possible areas of employment rather than be qualified in only one.

According to Margaret E. Adams, at the Eunice Kennedy Shriver Center in Waverly, Massachusetts, it is not enough to train the mentally impaired to be good producers at lesser-skilled jobs, because many of the jobs they learn may become automated in the future. She contends that training centers must prepare people for a broad range of skills, so they will have the flexibility to change jobs if need be, and that this approach would have the added value of providing skills that could be used in recreation as well as work.

The skill areas currently utilized by Kent Occupational are those in which the graduates of the program have found employment through the years, or those which provide opportunities to experience skills which would appear to be fruitful. It should be noted that even though the student may not build the skills necessary or find the areas of training satisfying for employment purposes, he may still gain skills that will generalize to other employment areas, such as an understanding of the mechanical operation of gears and pulleys and the dangers involved with machinery, or obtain skills that will assist him in his non-employment life, such as how to repair household items or clothing, or how to provide appetizing meals for his family.

Those skill areas presently offered and a description of their function are as follows:

Auto Body Repair includes complete sheet metal maintenance and repair, ranging from bumping, sanding, filling, masking and finish painting to rustproofing.

Auto Service includes lubrication and oil changing, new car preparation in washing and waxing, simple electrical systems maintenance, such as changing spark plugs and adjusting timing and distributor points, simple engine repair, such as adjusting carburetors and changing belts, and service station skills, including pumping gasoline, checking oil, and cleaning windows for the school's bus fleet.

In both auto skill areas, preference is given to serving students' cars. Not only is there more incentive for a student to work on his own or his friend's car, but by doing so we may assist the student with what has become a near necessity for employment - the availability of a reliable automobile for transportation to and from work.

The Industrial Skill training area is a simulation of a small scale factory, complete with overhead and table conveyors, air and electrically powered grinding, sanding, assembling, and cutting equipment, and warehousing, including use of an electrically powered hi-lo. The purpose of this area is to provide the student with the skills necessary to enter the industrial areas of employment - areas in which the majority of our graduates have found employment. The student is exposed to the noise, confusion, and complexities of a modern factory.

The Wood Shop provides training and evaluation in all areas of hand tool and power wood-working equipment operation. Employment is available in the woodworking industries of the Grand Rapids area, and as mentioned earlier, there are many skills provided here that will be applicable to home maintenance and repair.

Commercial Laundry provides training in all aspects of laundry operation, including sorting, taging, folding, and spot cleaning, and operation of home and commercial washers and dryers, mangles, and irons. Work for this area is provided by the uniforms from each skill area and the physical education and sports uniforms and towels.

Commercial Sewing provides training ranging from hand sewing to home and commercial machine operation. As in all areas, students enter with a great variation in background and skills. In this area, some students will have difficulty threading a needle, while others will have already progressed on their own or through instruction at home to a point at which they can master the preparation of an entire garment from a pattern.

The Housekeeping unit fulfills a dual purpose. This is a complete home, including living, dining, kitchen, utility, bedroom and bath. Students in this area are responsible for planning, purchasing, preparation, serving, and cleanup of their own meals, laundering their own clothes, and cleaning the home. The bedroom and bath portions of the suite are constructed in a manner similar to that of a typical motel room, and this area also provides training for the custodial and matron programs.

Custodial and Matron training utilizes the entire school building for training. Students are given instruction in all aspects of commercial cleaning, including dusting, washing and waxing floors, and cleaning of food, restroom, and office areas.

The foods portion of the program includes three areas. In Home Foods the student learns to plan, purchase, prepare, and serve home style meals in a home kitchen. That is, he must decide upon a nutritious meal that would fit within his assumed income level, go to the grocery store and shop for the needed items, return to school and prepare the food, serve it to his classmates, and clean up afterward. The purpose is to provide the student with the skills needed to manage his own or his family's food needs, and also to provide initiation into food preparation by learning the uses of food service equipment and preparation all at a home level.

Quantity Foods is the student's introduction to food preparation at the commercial level. A complete commercial kitchen is utilized, and the student prepares and serves the noon meal for all staff.

Commercial Foods utilizes another kitchen equipped with commercial fixtures, somewhat larger than that of Quantity Foods, in which the

students prepare the noon meal for the student body. They then serve on the serving line and clean up the commons area.

The snack bar which serves all fountain products including Coke, ice cream and candy, is operated by Commercial Foods. Students are responsible for maintenance of the area, taking orders and serving customers, operating the cash register, and maintaining inventory and ordering supplies.

On-The-Job Training

For the typical student enrolled in Kent Occupational, completion of two and one-half years of the combination of classroom and skill training experiences and attainment of age 18 qualifies him for entrance into On-The-Job Training. The attainment of 18 years of age is required because it ensures that the student is an adult under federal and state statutes, and therefore not bound by the restrictions of child labor laws and insurance regulations covering minors.

The student is assigned to one of three on-the-job training coordinators who will be responsible for his educational and employment program for the coming year. The student will be placed on a job in the community - a regular job paying regular salary and benefits - and he must perform to the same standards as those for the other employees of the firm. This is not a job tryout, as used in some programs, in which the student is placed on a variety of jobs obtained in advance for short periods of time. This job is one selected for the individual student, one which offers chance for success based upon the evaluations of the staff prior to on-the-job training, and one which conforms with the desires of the student and his parents as to type of employment,

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INSERT TABLE 1 ABOUT HERE

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It was found that 192 graduates (89%) were employed, 14 graduates (6.5%) were unemployed, and 10 graduates (4.6%) were unqualified for employment due to various factors. All those graduates then unemployed had proven themselves capable of employment, but were on temporary lay-off from jobs held for at least one year. These results are even more substantial when it is considered that they were obtained during a period of time in which nearly 12% of the general population of the County was unemployed.

The pay received by the employed graduates reporting ranged from a low of $.50 per hour to a high of $5.00 per hour, with a median wage in the $2.00 to $3.00 range.

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INSERT TABLE 2 ABOUT HERE

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This was at a time when the minimum wage was $1.65 per hour. It should be noted that the three students whose wages were cited in the $.50 to $1.00 range were involved in child care. Thus, their wages do not reflect the fact that room, board, and other benefits were provided in addition to their regular pay.

TABLE 1

Present Employment

of 1964-1972 Graduates of Kent Occupational High School

	Number	Percentage
Employed	192	88.9
Unemployed	14	6.5
Not Qualified	10	4.6
	216	100.0

TABLE 2

Present Pay Scales

of 1964-1972 Graduates of Kent Occupational High School

	Number	Percentage
$ .50 - $1.00	3	1.39
$1.00 - $2.00	54	25.00
$2.00 - $3.00	79	36.57
$3.00 - $4.00	38	17.59
$4.00 - $5.00	2	.93
Refused to State	40	18.52
	216	100.00

It can be seen from the listing of the then current employment, that the types of jobs obtained and maintained were varied and cover a broad range of the job market.

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INSERT TABLE 3 ABOUT HERE

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It will alsobe apparent that the vocational area in which the largest number of graduates were employed is the industrial or factory work area. This should be evidence enough for those who have maintained that the educable mentally impaired are destined only to be employed in service occupations. This is the area of largest number of placements because it is the one in which the highest wages are paid, and the one which requires the greatest degree of repetitive tasks and the fewest judgements. It is interesting to note also that the number of graduates involved in the industrial area increased from initial employment to current employment from 44 to 46 percent, thus indicating that job maintenance in this area was not a problem.

The financial picture indicated that, although a large number of the graduates had been in the employment field for only one, two or three years, 192, or nearly 89% were handling their own finances, and that a total of 131 (61%) were living on their own.

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INSERT TABLE 4 ABOUT HERE

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TABLE 3

Present Employment

of 1964-1972 Graduates of Kent Occupational High School

	#	%
Industrial	100	46.31
Housewife	21	9.73
Housekeeping/ Custodial	20	9.26
Food Service	18	8.34
Stock	9	4.18
Farm Labor	5	2.31
Laundry	5	2.31
Auto Repair	3	1.38
Refuse Pick-Up	3	1.38
Construction	3	1.38
Military Service	2	.93
Retail Sales	1	.46
Railroad	1	.46
Truck Driver	1	.46
Unemployed	14	6.48
A.D.C.	5	2.31
Disabled	2	.93
Deceased	2	.93
Welfare	1	.46
	216	100.00

TABLE 4

Financial Information About 1964-1972

Graduates of Kent Occupational High School

	#	%
Renting Apartment	88	40.74
Living with Parent/Guardian	83	38.42
Buying Home	25	11.57
Renting Home	13	6.02
Buying Trailer	5	2.32
Deceased	2	.93
	216	100.00

Handling Own Finances	192	88.89
Others Handling Finances	22	10.18
Deceased	2	.93
	216	100.00

This would appear to be a remarkable accomplishment for individuals whose academic abilities are approximately second or third grade level.

Personal-Social results are perhaps inconclusive in regard to marriage and divorce percentages, in that a large portion of the graduates were still relatively young. However, it is interesting to note that, although a large percentage of the graduates married individuals who were also mentally impaired, of the 49 children born to such marriages, none had any indications of mental or physical impairment.

The results clearly indicate the social and vocational success of the group studied. It therefore does not seem presumptuous to assume that the factors that were operating in the program were ones which were valid and would give similar results if replicated in other programs.

Essential Components of the Kent Occupational Program

What are the components of the successful programs, and how can they be incorporated into existing and new programs in other locales? It is difficult - if indeed it may not be impossible - to delineate all the factors which have a bearing on the complexities of educating a human being. It is perhaps even more difficult to determine the relative effectiveness and importance of the individual factors. However, it would seem that the following are of sufficient consequence to merit special consideration.

1. General Skills Training. Experiences in a broad variety of job activities seem necessary in order that the student gain a general understanding of the demands of the world of work.

2. Specific Skill Training. An opportunity should be provided for the student to learn the skills necessary for entry level into the types of employment in the unskilled and semi-skilled areas that will be appropriate.
3. Work Habits and Social Skills. A concentrated effort needs to be put forth to ensure that the multitude of factors that are necessary for employment, i.e., getting along with others, being groomed appropriately, calling in if ill, and the like, will be inculcated into the work personality of the student.
4. Work-Study or Job Placement. Regular, full-time, competitive employment must be provided under the supervision, advice, and support of the school. Only in this fashion can the student prove to himself that he is a capable adult.
5. Time for Maturity. Procedures that are automatically doomed because of inadequate age levels should not be attempted - the mental age of the student as well as the chronological age must be considered before initiation of any aspect of training.
6. Emotional Strength. An environment must be provided in which the student can become confident in his abilities, and internalize the fact that he is a viable part of society and a worthwhile human being. The situation must be one in which he can compete

and thus draw strength, in which he can be prepared prior to entrance into the highly competitive normal adult world.

The simplest, and perhaps the only method of adequately providing all of the above is to separate the educable mentally impaired from the normal population for his secondary school preparation for life. Such programming would appear to be possible in any area in which the population is relatively concentrated and the number of students in need of such services is large enough. Advocacy of this type of program will undoubtedly bring criticism from all corners - some insisting that it is philosophically unsound, others that it is impractical and too costly, and still others that it is a violation of federal and state laws or regulations or guidelines. However, such programs do exist, and others can as well, if we have the will to do battle with the establishment.

For those school districts in which a separate program is impossible because of small numbers of students or refusal by local educational authorities, the alternatives seem few, but the situation is not futile. The teacher of special education located in the regular high school must attempt to incorporate the attributes of the segregated program into his own program, even though he faces a situation that is basically antagonistic. He must resist the pressures to internalize the philosophies of the "typical program" as his own, because criticisms of his program will become attacks on his own worth and expertise. He must not attempt to justify what he does as philosophically sound, but admit, at least to himself, that it is done out of necessity and as a result of circumstances beyond his control.

We all must continue to demand equal educational opportunities for our handicapped students. Allowing the handicapped to be forced back into the mainstream of general education would be an abdication of our responsibilities and an alternative too tragic to consider.

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*This program does not appear in the monograph, but is available on videotape.

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